# THE BUILDER
## A JOURNAL FOR THE ARCHITECT & CONSTRUCTOR

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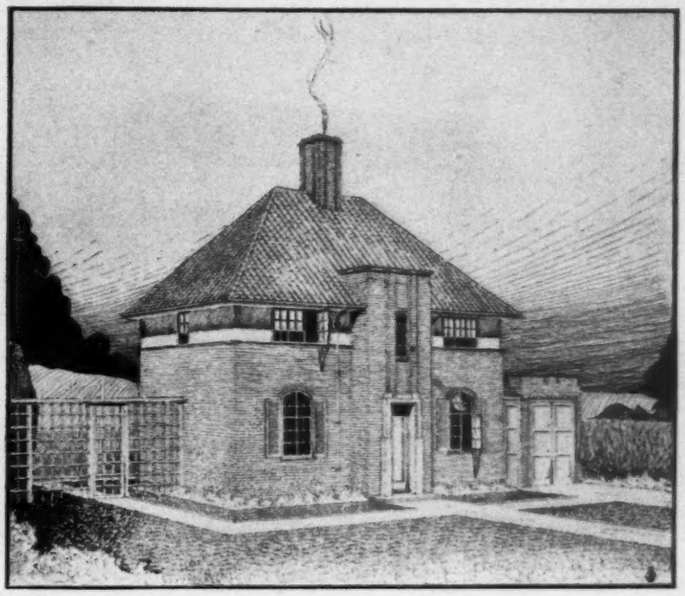
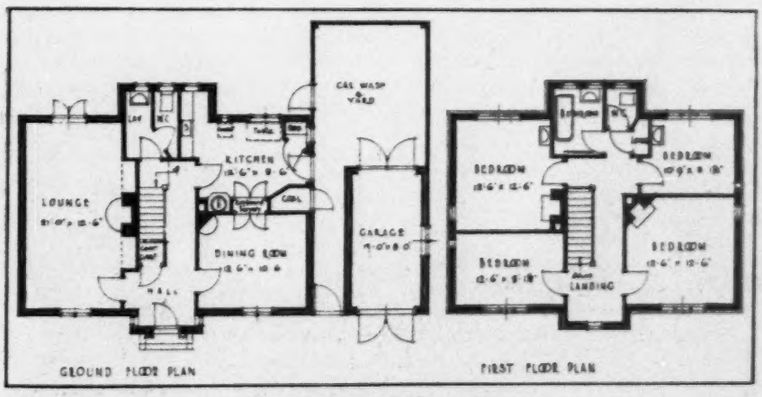





**A Small Suburban House.**

MR. JOHN LEECH, Architect.

## MEETINGS

FRIDAY, *April* 1.

*Incorporated Association of Architects and Surveyors.* Mr. Leslie Maddock on "The New Town and Country Planning Bill." 7 p.m.

*Institution of Structural Engineers (Midland Counties Branch).* Mr. J. Stuart Lewis on "Tolerances and Clearances in Structural Steelwork." At Birmingham. 6.30 p.m.

MONDAY, *April* 4.

*Society of Engineers.* Mr. H. A. Lingard on "Industrial Lighting." 6 p.m.

TUESDAY, *April* 5.

*Hull Guild of Building.* Mr. T. H. Jones on "Modern Waterworks Appliances."

WEDNESDAY, *April* 6.

*South-Eastern Society of Architects.* Annual Meeting, 7 p.m.; Mr. Kenneth Ryde on "Croydon in the Past," 8 p.m. At the Public Halls, George-street, Croydon.

THURSDAY, *April* 7.

*Society of Antiquaries.* Mr. J. G. Mann on "Spanish Armour from the Tenth to the Fifteenth Century." 8.30 p.m.

*L.C.C. Central School of Arts and Crafts.* Dr. R. E. Stradling on "Building Research." 7.30 p.m.

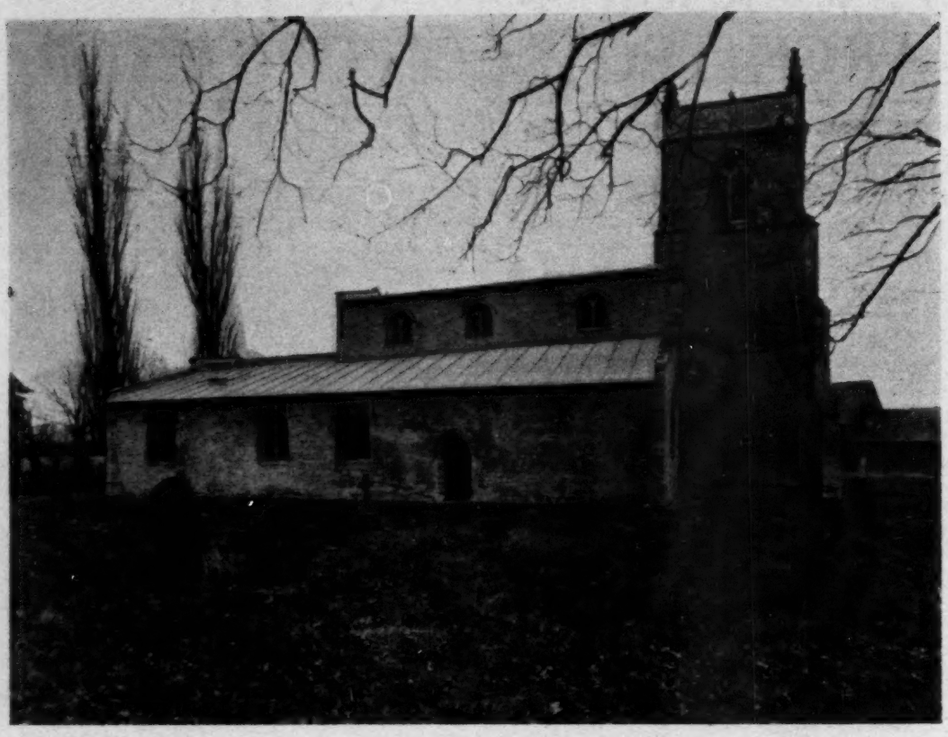
*Institution of Electrical Engineers.* Dr. F. Luschen on "Modern Communication Systems." 6 p.m.

*Brighton and District Chapter of the South-Eastern Society of Architects and the Sussex Associations of Building Trades Employers.* Mr. Sydney Tatchell on "The 1931 Form and Conditions of Contract." At the Cavendish Hotel, Eastbourne. 3 p.m.

*Institution of Civil Engineers.* Meeting to consider a provisional report of a sub-committee of the Institution on the drafting of Bills of Engineering Quantities. 6 p.m.

FRIDAY, *April* 8.

*Hampshire and Isle of Wight Architectural Association.* Mr. Arthur J. Davis on "Aspects of Contemporary Decoration." At Bournemouth. 7 p.m.



VIEW FROM NORTH.

VIEW FROM SOUTH-EAST.

**St. Mary's Church, Shelton, Bedfordshire, as recently repaired.**

MESSRS. RICHARDSON AND GILL, FF.R.I.B.A., Honorary Architects.

# THE TOWN AND COUNTRY PLANNING BILL

THE Town and Country Planning Bill proceeds on its course, suffering perhaps an anti-climax from the stirring politics of last autumn. Such criticism as finds voice in Parliament expresses itself more in protest against any further legislative interference with personal liberty than with any detailed objection to features of the Bill. In the country, complaints, confused with some bewilderment, arise with more persistence, though much in the same vein as the protests at Westminster. While we rightly insist that the rights of private ownership must as far as possible be respected, many people find it very difficult to appreciate that the ownership of property is by the grace of society and not in spite of it, and the idea of being restricted in any way but by private covenant on his own freehold is somewhat repugnant to the traditional English temperament.

A good deal of confusion of thought persists upon this aspect of the proposed new legislation. The ownership of land has always, and must always, carry with it certain obligations to society. Owners must not permit a nuisance to be created on their property however tight and complete their holding may be, if it prejudices the enjoyment by their neighbours of adjoining property. The owner of land is not permitted to allow weeds to germinate on his land that might otherwise contaminate adjoining land. If he builds he must do so subject to certain by-laws and regulations, and the extension of his premises is already limited to some of these. It is therefore hardly correct to think of the new Town Planning Bill as a revolutionary measure striking inroads in an entirely new direction into the liberties of the individual. Rather should it be regarded as an extension of existing legislation arising out of some generation of experience during which some measure of restriction has been beneficially administered.

The greatest bone of contention in modern Town Planning requirements centre upon the questions of building lines and of prescribed density; and some sympathy must be extended to those unfortunate freeholders who may find some portions of their property completely sterilized by new regulations. The case of an individual who had bought a shallow frontage on a main road for the purpose of developing a motor service station, only to find that the whole of the site stood in front of a prescribed deep-building line, is a case in point where circumstances have proved unkind. Others are more general where the owners of half-developed building estates have found the prescribed density of the area already saturated and have been left with large areas of potential building land which must remain unbuilt upon. These are the hard cases which so often obscure the greater benefits for the greater number, and it is not a hard heart which directs a view over those to the broader aims.

Hard cases in property ownership present no fresh experience. We are all familiar with the many instances where a nice residential estate has been entirely spoiled by the erection of some factory, housing scheme or estate of less worthy type, and it can be said, with some truth, that no owner of a site could be secure in its value without buying up the landscape on all sides for protection purposes. Owners who suffered thus had no redress whatever.

An attempt to stabilise the values of sites by prescribing density limits is therefore one which should be sympathetically considered by all who have at heart the interests of the community. The Bill, by prescribing no more than so many houses to the acre of different areas on the map, by allotting fixed zones within which commerce and industry must develop, by preserving for all times areas of land which shall remain open, does make a big stride towards the ideal of stable values and conditions. In the circumstances it would create, the buyer can invest his money in real estate, with some assurance that it will stand for all time at a decent market value which unneighbourliness will not be permitted to depreciate. Some of the provisions as to deep building lines are a direct incentive to the full development of back land and a check to that pernicious growth—ribbon development—which so quickly swallows up all visible signs of the countryside along the main roads radiating from the greater cities and even from many of the small towns in the country.

We can start, then, with the assurance that the Bill has great potentialities for the public good. It is designed, as all legislation is at least ostensibly designed, to advance the cause of social progress, check irregular and unfair development, and remove the causes of disorder by replacing them with the conditions of order. In general outline, and in most details of drafting, we believe the Bill bids fair to achieve what it professes, and we believe the majority of architects and builders will welcome its arrival, even though its complexity may create difficulties in the movement.

So far as these difficulties are concerned, we believe most of them arise out of the lack of knowledge which persists, even in some official circles, as to the exact scope and requirements of the law. Many have been for some months working in an anticipating way as though the Bill were already law, and we find many of our readers conscious of a certain atmosphere of uncertainty with the officers of local authorities when matters of town planning are under review. They are not always able to get prompt decisions upon matters upon which hinge the going forward or abandonment of important building projects. Many decisions thus given are given only with the reservation that they are subject to the confirmation of a higher authority, and for the moment many difficulties are created which will not exist when the wheels begin to run smoothly again.

Perhaps the Bill should have been developed alongside a more thorough propaganda designed definitely to educate the public as to its aim and the benefits likely to follow, and also those more technically interested, such as public officials, architects and builders whose work in the future will have to run on the lines laid down in the Bill. A good deal of criticism would have been stifled by this means and an enlightened common sense would have promoted enthusiasm in place of common public apathy. For the future we have to look to probably a better educated public whom a better educated profession will serve. Town planning has not been included in the school curriculum for sufficiently long a period to make felt the wider spread of knowledge, but that knowledge must eventually assert itself.

On the provision for the control of elevations we had something to say not many weeks ago, and we shall add now only the hope that such powers in this direction as are adopted may be exercised with the fullest discretion, and that the utmost co-operation with skilled architectural opinion should be promoted.

For the rest we would urge upon our readers the necessity for all citizens to make the legislation as smooth and as effective as possible; and for public officials to implement it in a far-seeing and broadminded manner. In such an atmosphere the future of building in this country is a fair prospect upon which we can look with confidence and pleasant anticipation. If legislation could rub out all the misdirected past it would be still better, but for the sins of our fathers we shall continue to suffer for many generations to come.

# NOTES

**The Building Centre Ltd.**

In our last issue we published extracts from a letter we had received from a Fellow of the Royal Institute of British Architects in reference to the new Building Centre which has been formed, particulars of which we gave on March 11th in our report of the luncheon given by the Centre. We understand that strong exception is taken to our correspondent's statement by the architect members of the Board of Directors of the Building Centre, Ltd., who regard it as libellous upon themselves. Needless to say we did not and do not associate ourselves with any reflection on the *bona fides* of any of the members of the Board, whose standing in the profession could not possibly justify the interpretation they put upon our correspondent's remarks. Nor do we believe our correspondent himself desired to cast any reflection upon the members of the Board. We should like to add that we received advance particulars from the Building Centre with regard to its constitution and scope and our representative was invited to, and attended, the inaugural luncheon which was held recently, and we are aware that the Building Centre enjoys the patronage and support of the Councils of the R.I.B.A. and the Architectural Association, and we are assured that there is no basis for our correspondent's suggestion that it is an "advertising stunt" or "impinges upon the unwritten code" of the members of the Institute.

**Reinforced Concrete Structures.**

A COMMITTEE has been set up by the Building Research Board of the Department of Scientific and Industrial Research "to review present methods and regulations for the use of reinforced concrete in building and to make recommendations for rules of practice embodying the best available technical information and experience." The immediate occasion for the appointment of the Reinforced Concrete Structures Committee was a request from the London County Council. The Council wrote to the Department referring to the activities of the Advisory Committee appointed by them to consider and report on any necessary amendments of the London Building Act, 1930. This Advisory Committee, it was stated, were impressed with the draft code of practice, drawn up by the Steel Structures Research Committee, for the use of structural steel in building, and considered that their work would be greatly facilitated if they could be furnished with a similar code for the use of reinforced concrete. Urged by this request, and appreciating also the national need for authoritative up-to-date information on the design and construction of buildings wholly or partly of reinforced concrete, the Department of Scientific and Industrial Research decided to set up a committee of the Building Research Board forthwith, under the chairmanship of Sir George Humphreys, Chairman of the Board. Another member of the Board, Mr. B. L. Hurst, was also appointed on the committee. The Institution of Civil Engineers, the Royal Institute of British Architects, the Chartered Surveyors' Institution, the Institution of Structural Engineers, the Institution of Municipal and County Engineers, the British Standards Institution and the Institute of Builders were each invited to nominate two members. All the institutions willingly accepted the invitation, with the exception of the British Standards Institution, who preferred to assist later, in the preparation, if wanted, of a British Standard Specification based on the proposed code. The committee consists of 14 members. The Director of Building Research, Dr. R. E. Stradling, is acting as executive officer to the committee.

**Gas Fire in an Architect's House.** (*See page* 614.)

**Functions of the Committee.**

IT will be realised that the functions of the Committee are limited to the drawing up of technical rules of practice based on existing knowledge and experience. No special funds are available for research, and the committee is in no way concerned with the framing of legal regulations or with other administrative action. It is hoped, however, that the code of practice, when drafted by the committee, will be of assistance not only to the London County Council, but also to the Ministry of Health and other building authorities in any actions they may consider it desirable to take. It may be mentioned that the London County Council, on the recommendation of their Advisory Council and of their Building Act Committee, have approved "a code of practice for the use of structural steel and other materials in building as the basis of consideration of application under Section 58 of the London Building Act, 1930, for release from the provisions of the third schedule of the Act." This code is based on the recommendations of the Steel Structures Research Committee, whose

report was referred to in our issue of February 12, and again in our editorial of February 26.

**The Destruction of Churches.** We have previously commented in these notes on the threatened destruction of churches in towns and the country, and on March 16 Mr. S. E. Dykes Bower discussed the subject in a lecture to the St. Paul's Ecclesiological Society at the Royal Institute of British Architects. Pointing out that it was idle to make light of the difficult situation facing the Church, in some places over-supplied with churches, he said that some of them would almost certainly have to go. There need be no serious loss, however, if only the right ones went, and it would be foolish to fight about buildings like St. Mary's, Charing Cross Road, and St. Peter's, Great Windmill Street. But the concentrated destruction of churches on the lines recommended by various local commissions—six at Exeter, five at York, two at Lincoln, and so on—was deplorable. In each of these places churches had been condemned that were of great merit in themselves and in their relation to their surroundings as street architecture were invaluable. Particularly unsatisfactory was the apparent tendency to regard anything later than the 16th century as scarcely architecture at all.

**So-called Redundant Churches.** Mr. Dykes Bower emphasised the desirability of the Church retaining the use of these so-called redundant churches rather than surrendering them to secular purposes, and examined in some detail a variety of ways in which they might be of service. He suggested that the real trouble lay in a want of imagination in the Church's approach to this problem. For years past it had failed to make effective use of these churches; now it suddenly said that they had no usefulness. The unions of benefices at present under consideration should, in many cases, have taken place years ago, so that some of the churches could have been set free for such wider activities as many of the London city churches pursue to-day with marked success.

**The R.I.B.A. and Waterloo Bridge** The following letter has been addressed by Dr. Raymond Unwin, as President of the Royal Institute of British Architects, to Mr. Angus Scott, Chairman of the London County Council:—"Now that you have taken up office as Chairman of the Council, I should like you to know that however much we architects may still feel not satisfied that the demolition of Waterloo Bridge has been shown to be necessary, we do very cordially agree with the choice of the architect that your Council has made. If there must be a new bridge there is no architect I am sure whose choice would command more universal approval than that of Sir Giles Gilbert Scott; and altogether apart from any question of whether the existing bridge could or could not be preserved, I do want you to know that the architectural profession is entirely and completely satisfied with the architect you have chosen, and that he has our entire confidence in regard to the work." Those who have the preservation of the bridge at heart will fully approve this letter, written, as it is, "without prejudice" to the well-supported belief that the demolition of the bridge is by no means necessary. If new bridge there must be, then the profession is worthily represented by Sir Giles; but we believe that the mistake (wasteful both of money and of a national possession that is irreplaceable) of such an action may yet be avoided.

**Sculptured Figure, "Destiny," on "Abbey House," Baker Street, N.W.**

Mr. J. J. Joass, F.R.I.B.A., and Mr. Daniel Warry, Associated Architects. Mr. Donald Gilbert, Sculptor.

**The London Housing Problem.** A Memorandum, addressed by Mr. G. W. Currie (Chairman, in 1925, of the Chelsea Housing Association) to members of the London Diocesan Conference, draws attention to the present state of negotiations affecting building and slum-clearance in London. "Deplorably little," says the Memorandum, "has really been done for the London slum-dweller or to cope with London overcrowding. The Bishop of London's action (a resolution in support of continuous action) was specially opportune in that the demand for all reasonable economy so much in evidence lately has, undoubtedly, threatened to curtail much-needed schemes." *The Builder* has repeatedly drawn attention to this state of affairs, and the Memorandum draws further attention to some of the more urgent cases.

**A Suggested Remedy.** Many examples are given, and the Memorandum, after pointing out that in nearly every case suitable sites are available for tenements, states that the 1,000 houses which Westminster has already put up have added only two-thirds of one-farthing in the £ to the rates, and that one of the last schemes passed by the Kensington Council was to provide 71 flats at a total cost to the ratepayer of one-fiftieth part of one-penny per annum. The Memorandum concludes with the opinion that the London County Council should reduce the rental of three out of four of its houses by 3s. per week, which, while easing the needy tenant, would add something less than one-penny to the London County Council ratepayer.

# GENERAL NEWS

**New Baptist Church Building, Balham.**

In connection with Ramsden-road Baptist Church, Balham, S.W., a new memorial building has just been opened. Mr. A. C. Pickford, A.R.I.B.A., is the architect.

**"Haig House" at Ypres.**

"Haig House," the gift of a British donor to the Ypres Section of the British Legion, was opened at Ypres on March 27. It is in the Rue Courte de Thourout, and is intended for the use of members and former members of the British Legion and their families when visiting Ypres.

**Lectures on Building Contracts.**

A special course of lectures on "Building Contracts" will be given at the Westminster Technical Institute, Vincent-square, S.W.1, by Mr. W. T. Creswell, Barrister-at-Law, Hon. A.R.I.B.A., A.S.I., on Tuesday evenings at 6.30 p.m., commencing Tuesday, April 5. Particulars may be obtained from the Secretary at the Institute.

**Decorative Plastering.**

The ancient craft of plastering varied considerably from simple forms to examples of a highly decorative character. Much external plaster work exists in the country, notably in Essex and Suffolk, which are rich in domestic examples, and encourage the wish that some simple form of plaster decoration could more generally be introduced into our modern small houses, so many of which are bare and devoid of interest. The example of internal plastering shown below is a mantelpiece at "Wood," Devon, and is a worthy example of the work of the late G. P. Bankart.

**Kensington's Housing Conditions.**

The Westminster Survey Group, which has been responsible for a number of housing surveys in different parts of London, has co-operated with the Survey Committee of the Kensington Housing Association in inquiring into conditions of life in some of the black spots of the Royal Borough, and the report, compiled by the Westminster Group's surveyors, Mrs. Irene T. Barclay, F.S.I., and Miss Evelyn E. Perry, F.S.I., has just been published by the Weardale Press, Ltd. (price 3d.). The chief trouble, it seems, is overcrowding. "Legal" overcrowding is unusual, but the legal standard is so low that it is possible for parents and eight children to live in two rooms of an ordinary Kensington house—rooms, moreover, that are dark, damp and verminous. The report, however, is not pessimistic. The Royal Borough of Kensington is fortunate in possessing several available building sites, and plans are already afoot for extensive re-housing schemes. The surveyors pay tribute to the efforts already made in this direction by the Borough Council.

**Miners' Welfare Fund.**

The 10th report of the Committee appointed by the Board of Trade to allocate the fund, together with the fifth report of the Selection Committee appointed to administer the Miners' Welfare National Scholarship Scheme, has now been issued (H.M. Stationery Offices, 1s. 6d. net). In 1931, 665 allocations were made for recreational purposes, for the provision of recreation grounds, institutes, etc., and swimming baths. Pit welfare accounted for £36,659, being disbursed for pithead baths, canteens, etc. Hospital services provided during the year included a £12,000 extension at Clayton Hospital, Wakefield. Various extensions were also carried through.

**Railway Statistics.**

The Secretary to the Ministry of Transport makes the following announcement:—

The statistics for October, 1931, have now been published by the Minister of Transport, and can be obtained at His Majesty's Stationery Office (price 2s. 6d., post free 2s. 7½d.). In addition to the usual information, the volume contains statistics in respect of collection and delivery of goods train traffic at selected depots in September, 1931. The total number of passenger journeys (excluding season ticket holders) taken on all standard gauge railways in Great Britain in October, 1931, was 96,421,272 a decrease, compared with October, 1930, of 4,695,997, or 4.6 per cent. The journeys taken by passengers at reduced fares decreased by 1,452,897, and those at standard or ordinary fares by 3,243,100. The total tonnage of freight conveyed (excluding free-hauled traffic) was 24,244,059, a decrease compared with October, 1930, of 2,053,299 tons, or 7.8 per cent.

**Town Planning in England and Wales.**

Following are details of town planning schemes submitted during the month ended December 31, 1931:—

Schemes submitted (Stage C).—Derbyshire: Chesterfield T.C. (Amendment Scheme No. 2). Kent: Dartford U.D.C. Yorkshire (E. Riding): Kingston-upon-Hull T.C.

Draft Schemes adopted (Stage B.B.B.).—Kent: Sidcup U.D.C. Hertfordshire: Harpenden U.D.C.

Preliminary Statements approved (Stage B.B.). — Devonshire: Paignton U.D.C. Durham: Sunderland T.C. (No. 2). London: London C.C. (No. 7). Yorkshire (W. Riding).—Great Ouseburn R.D.C. (Nos. 1 and 2); Rothwell U.D.C.

Preliminary Statements submitted (Stage B.).—Cornwall: S. Ives T.C. (three areas). Derbyshire: Chesterfield T.C. (Section 2); Chesterfield R.D.C. (Section 2); Bolsover U.D.C. (Section 2). Dorset: Poole T.C. (supp. area). Essex: Tilbury U.D.C. Lancashire: Huyton with Roby U.D.C. Middlesex: Ealing T.C. (Scheme B.). Staffordshire: Sedgley U.D.C.; Newcastle-under-Lyme T.C. Yorkshire (W. Riding): Wortley R.D.C.

Resolutions received (Stage A.).—Gloucestershire: Gloucester T.C.; Gloucester R.D.C. (Gloucester T.C.). Surrey: Epsom U.D.C. (No. 2). Staffordshire: Willenhall U.D.C.; Wednesfield U.D.C.; W. Bromwich U.D.C.; Rowley Regis U.D.C.; Short Heath U.D.C.

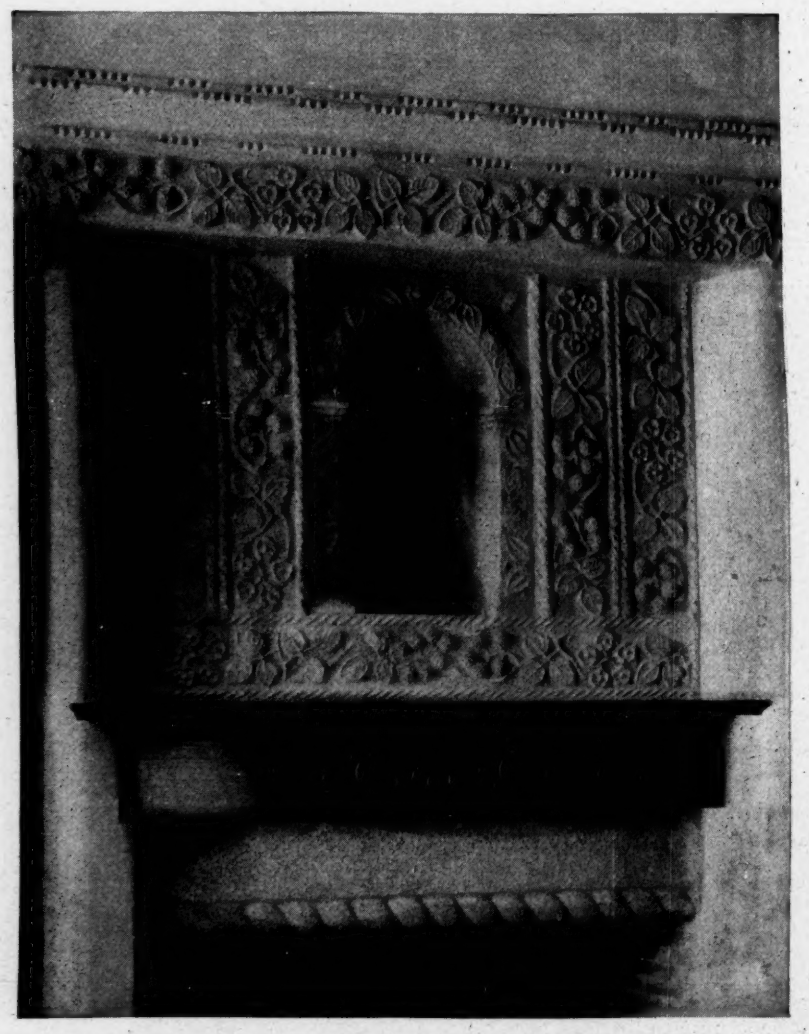
# COMPETITION NEWS

**Municipal Technical School, Southport.**

The assessor, Mr. Francis Jones, F.R.I.B.A., has made his award in the competition, confined to Lancashire architects, for designs for a new Municipal College and School of Art for the Southport Education Committee. The winning design is that of Messrs. Cruickshank and Seward, A.R.I.B.A., of 18, Booth-street, Manchester. Messrs. Bradshaw Gass & Hope, FF.R.I.B.A., of Bolton were placed second, and Messrs. Finchett and Lancaster, LL.R.I.B.A., 13, Hoghton-street, Southport, third. Premiums of £200, £100 and £75 were offered.

**COMPETITIONS OPEN.**

| | Particulars published in "Builder." | Sending in date. |
|---|---|---|
| Design for all-British house to cost £1,000 exclusive of site and architect's fees. Premiums of 50, 20 and 10 guineas. Conditions from organisers Incorporated Association of Architects and Surveyors, Wilbraham-place, S.W.1 ..... | Nov. 20 | Sept. 1 |
| Open Competition designs for new Hospital Buildings on Woodlands Estate, Scarborough, for Scarborough Hospital and Dispensary. Premiums of £300, £200 and £100. Assessor, Mr. Hubert M. Fairweather, F.R.I.B.A. Conditions from Hospital Hon Sec., Scarborough. Dep. £1 1s. ..... | March 4 | Oct. 1 |
| Designs for buildings for the practice of sports, for Tenth Olympic Games. Prizes will be awarded by international jury. Details from Mr. L. Rome Guthrie, c/o R.I.B.A. ..... | Jan. 22 | — |
| Designs from architects resident in Scotland for new advanced school, Inverness, for Inverness County Council. Assessor, Mr. J. D. Cairns, F.R.I.B.A. Conditions from Mr. R. Robertson, County Surveyor, 26, Bank-street, Inverness. Dep. £2 2s. ..... | March 4 | — |



**Plasterwork above Mantelpiece, "Wood," Devon.**

# CORRESPONDENCE

### The Cost of Economy.

SIR,—As reported in *The Times* of March 19, and in your notes of March 25, the Prime Minister said in his speech to the Abbey Road Building Society that economy means "... cutting down useless expenditure and expenditure that cannot be afforded —expenditure that can only be met out of capital or by borrowing."

Expenditure out of capital includes, for example, death duties, which the Prime Minister appears to think cannot be afforded. Nor does he approve of borrowing; apparently it is not economy. But the Abbey Road Building Society exists for the purpose of lending; without borrowers it would go out of business.

It would have been helpful if the Prime Minister had remarked upon the difference between borrowing money already in existence from individuals and borrowing created money from a bank; and, further, the effect on prices of each of the two entirely different kinds of borrowing.

ARTHUR WELFORD.

### Damp New Buildings.

SIR,—Your editorial and the excellent article by Mr. J. R. Taylor in *The Builder* for March 18, will do a very great service if they cause some hesitation in applying the principles suggested by scientific research before they have been thoroughly proved under the conditions that inevitably pertain to practical building work. It is a healthy sign that, whereas a few years ago it was confidently asserted on the evidence afforded by laboratory experiments, that ordinary concrete could be made waterproof without any extraneous additions, it is now recognised that ordinary concrete cannot be relied upon to provide the degree of impermeability necessary even when it is placed over the earth under wood floors, and it is suggested that a layer of broken brick be placed under such surface concrete in order to insulate the concrete from the damp earth.

The placing of a layer of hardcore under concrete floors is, of course, sound traditional practice, and it does, no doubt, hinder the access of moisture to the underside of the concrete. There is, however, another purpose served by this hardcore which may not be generally appreciated, and which was brought home to me when, on one occasion, I omitted this layer of hardcore, and laid a floor of ballast concrete waterproofed by an integral admixture, directly in contact with the clay subsoil. The waterproofing of the concrete effectually prevented any access of moisture to the surface of the floor, but after some months of exceptionally wet weather, I discovered that the floor had cracked completely from one end to the other, and when the surface was tested by a straightedge it was evident that this cracking was due to an upheaval of the concrete consequent upon the swelling of the clay. Had a layer of hardcore been provided under this floor, the swelling of the clay could have vented itself in the interstices of the hardcore, but as it was in contact with the unyielding surface of the concrete, which was not reinforced, the upheaval and cracking of the concrete became inevitable.

The soundness of the suggestion in Mr. Taylor's article that the external walls of a new building should be rendered on their inner surfaces with waterproofed cement mortar is made evident by the accompanying photograph, which was taken six weeks after the completion of the interior plastering of a house built for the writers' occupation. The undercoats of the interior plastering to walls and parts of walls with an outside exposure were done with waterproofed cement mortar, and the dryness of the skimming to those parts is seen to be in marked contrast to the dampness that still persisted in the adjoining plastering to an internal partition wall, plastered at the same time, but having its undercoats of gypsum plaster and sand; this dampness, of course, arose from the moisture of construction. It is obvious, therefore, that when outer walls—which are usually the thickest and contain the most moisture of construction—have their interior surfaces thus waterproofed, this moisture must dry outwards, thus giving a dry house much earlier and obviating many of the troubles, such as swelling of joinery and staining of decorations, which all are familiar with in new buildings.

I have formed the opinion that the hermetical sealing of the interior surface of a porous wall increases its resistance to penetration by rain, because, just as water cannot enter a tumbler that is thrust mouth downwards into it, so the driven rain cannot enter the pores of the brickwork until the occluded air is expelled, and the escape of this air from the surface against which the rain is beating is much slower than it would be if it could be driven through a porous internal plastering into the room. That a flow of air does occur through the substance of solid walls is well established; indeed, the Research Station found by experiment that a 9 in. solid brick wall of ordinary construction plastered and distempered on one side permitted air to flow through a square foot at the rate of 8.5 cubic in. per hour under a pressure that corresponded to a wind velocity of 15 miles per hour; with winds of higher velocities, common in this country, the rate of air flow would, of course, be considerably increased.

L. E. WALKER.

### Sheffield Masonic Hall Co., Ltd. *v.* The Corporation.

SIR,—May I be permitted to correct an inaccuracy in the report of the above case in *The Builder* of the 18th ult., page 526? So far from stating in evidence that no depreciation would be occasioned to the plaintiffs' building, which would have been ridiculous in view of the substantial sum paid in by the defendants upon my advice, I gave evidence of damage to certain rooms, which is quoted in detail in the judgment, a transcript of which is before me; but included nothing in respect of one room which remained well lit from other directions Unfortunately for my clients and for architects, the learned judge held that light left must be discounted by the possibility of new buildings on other sites of the same height as that complained of.

May I also point out that the particulars of the photo theodolite published in *The Builder* and referred to in Mr. A. C. Stevenson's paper read before the International Illumination Congress at Glasgow last year, and also the patent specification of the instrument, claim only ability to measure angles and make no claim for measuring daylight factors. The system of measuring daylight factors by means of superimposed grilles was first published in *The Illuminating Engineer* of December last, after a patent application had been filed. The instrument in which it is used was exhibited at the exhibition of the Physical and Optical Society this year and at the Royal Institution on the 4th ult.

PERCY J. WALDRAM.

# ARCHAIC GREECE

THIS is a book* that should appeal more to a reader than to a reviewer, since it is notorious that a reviewer is not one who really reads a book: he skims, attempts to justify his existence, and passes on to the next. This reviewer found that every word had to be read, every figure scanned, since the details culminate into a definite whole. The volume follows "Homeric Greece," and the trilogy will be crowned by "Classical Greece," as climax to the greatest cultural civilisation in history. Taking these first two volumes together it would be difficult to imagine a more appropriate approach to the humanities, uniting as they do history, poetry, architecture, and the manual arts. Scholars must envy these authors the tact with which they allow their erudition to reveal itself. To them it is an adventure into the past, which they share with the reader.

The plan is admirable. Picking up the thread where we had left it at the close of the Golden Age (1183 B.C.), we follow the fortunes of the scattered Greeks to the Battle of Salamis in 480 B.C. We trace them in war and peace, we see their temples and houses, we share their daily lives and sports, till finally we leave them in their admirably designed tombs. The illustrations that supplement the text are so helpful and, we believe, so faithful that any small anachronism stands out. Fig. 36, p. 75, represents a fountain overhung by clusters of flourishing opuntias (prickly pears); these ubiquitous plants were, however, indigenous to the New World, and were only introduced into Europe from Mexico at the end of the sixteenth century.

The authors are impatient with the modern assumption that beauty is necessarily identified with utility and function. Greek architecture arose from logical construction with timber, but subsequently, with the use of stone, tradition and abstract form persisted without conscious deference to purely constructional principles. It is also wholesome to remember that while Archaic Greeks achieved delightful examples of what we now call architectural sculpture, these works were but the forerunners of definitely representational and naturalistic forms in the great classical climax. Once again art transcends the limitations set by the pundits.

We could hardly find a more timely conclusion than the authors' final words in the preface: "To-day, when trade is bad, and we find considerable difficulty in selling the mass-produced oddments of a 'gadget' age, we might take a leaf out of the Greek book and try our hand at making beautiful things."

* "Everyday Things in Archaic Greece." By Marjorie and C. H. B. Quennell. Batsford. London: 1931. 7s. 6d. net.

**Interior Plastering.** (See letter on "Damp New Buildings.")

# THE AMERICAN HOME

By a Former Associate of the Liverpool Architectural Society.

I will begin this article by making myself immediately unpopular by saying that in architecture and building, as in many other things, the Americans are fifty years ahead of us. This, of course, will be disputed, but the only way to prove it is to live in America and work in their architectural offices. There are many reasons for this state of affairs. One is the natural progressiveness and aggressiveness of the American. He is always moving forward, trying new ideas, new materials. No grass grows under his feet, no conventions hold him back. The big factor behind this development is money, which is very lavishly used in most types of construction. The American believes that the way to prosperity is to spend money, whereas the older nations hold the opinion that to save money is the only effective method. It is obvious that if money is hoarded it is not in circulation, and if it is not in circulation people cannot get hold of it. Unless one spends there is no possibility of another receiving. That is why I personally am opposed to the principle of our local authorities and public bodies at home, whose first and last thought in building seems to be extreme economy. That is why America has finer schools, public buildings and institutions; they are not afraid to spend money on them. And it becomes obvious that the public are the ones to benefit in the end.

For these reasons it will be found that the American home is a highly developed achievement, costing on the average from two to three times its English counterpart. The Americans, with all their apartment houses, are essentially a home-loving people. It is estimated that 80 per cent. of the people live in their own homes. A sidelight on the interest which is taken in the home is the fact that even in these hard times there are at least six magazines devoted entirely to the home, its furnishings and gardens, being sold to-day.

Owing to the great size of the country—a size which the average Englishman is quite unable to appreciate—and the great number of cities and towns, the number of houses built annually must reach a tremendous figure and the quickly accumulated experience in this field ensures rapid progressiveness. Almost every conceivable type of house is built, varying from the Dutch colonial of Pennsylvania to the Spanish and Italian of California. The country has, owing to its vastness, all types of climate, and naturally this often dictates style and conditions. In America, as in England, the speculative builder with his usual lack of imagination has managed to defile the countryside with his monstrosities, but the standard of architect-designed house has improved immensely in the last few years. There are many organisations, such as the mail-order house of Sears Roebuck, that design and sell their own houses, which are usually constructed of wood and brick, and whose design is often of very pleasing character. The English-type house, particularly that of Tudor design, has found great favour in the past few years. I have actually seen more books on English house design in American architectural offices than I have ever seen in English offices themselves. In fact, certain suburbs of two Pennsylvania cities I have seen have been so English in feeling and lay-out that it has been difficult to appreciate the fact that this is America.

In earlier years, when architects were few and there was less leisure, practicability was the first essential in a house. Any beauty it had usually arrived by accident. The bulk of these early houses were built of wood, which was cheap and plentiful. In these days every type of synthetic and natural material is used, and the variety of designs and materials is bewildering.

The popular type of house at present is the eight-roomed type, consisting of large living-room, smaller dining-room, pantry, kitchen, three bedrooms and two bathrooms with full cellar underneath. Every American house has a cellar. This usually accommodates (a) the heating plant; (b) the hot-water heater; (c) the incinerator; (d) the washing machine and accessories.

The long hot summers make an open porch an essential feature, and porches are invariably to be found on all kinds of houses. On a summer's night, walking down an American street in the dark, one is always aware of murmuring voices and knows that the porches are occupied with people appreciative of the comparative cool of the evening. These porches are provided with some form of swinging seat, hammock, or deck-chair of some description, which usually remain out all summer and are stored in the cellar when autumn arrives.

Something rarely found in England is common practice here. That is the wire-mesh door and window screen. As a result of the use of these a fly is seldom seen in a well-ordered American home. It is looked upon with aversion, and as a result people are not bothered with flies as they are at home. I still have a vision of the many devices we used to adopt to rid ourselves of the English fly, which alighted indiscriminately on food, filth and everything. Contrary to what one would expect, these screens do not spoil the appearance of a house and are adaptable to all types of casements and double-hung windows. The screen is a feature which I think should be adopted at home. It is inexpensive and effective. The screens, of course, are taken down in winter and stored in the cellar.

I know I would offend if I said that the Americans were a cleaner race than ours, so I will content myself with saying that the facilities for cleanliness are much more common and are more used. The bathroom is a much more popular feature than we make it.

In modern houses the tendency is to have one bath to each bedroom and usually opening off it. All eight-roomed houses have at least two bathrooms. More often than not, if there is a maid, she has her own private bathroom, too. Certainly no modern hotel would "get by" without a bathroom to each bedroom. As an example, the Stevens Hotel in Chicago has three thousand bedrooms and three thousand bathrooms. It sounds extravagant, but is an accepted standard, and that is why the American in London does not like having to walk along a corridor to a common bathroom used by several guests.

It has to be admitted that the hot summer almost makes the shower a necessity, and that is one reason why the bathroom is so popular. The concessions made to feminine personal hygiene here require modern bathrooms to open directly off the bedrooms. It must be remembered that modern ventilation principles make this a perfectly sound proposition, although at home we usually provide an air-lock between a bathroom and a public room.

With regard to heating, all houses in America are centrally heated, and have been for years. The cold winters of the north make this an absolute necessity. To my mind, however, central heating should be equally necessary in England, owing to the rain and the general dampness of the country. America's climate is generally very dry, summer and winter. Once one has experienced the comfort of a heated house he would be reluctant to live in one heated only by fires. No getting up on a cold morning, dispensing with a bath, and hurrying into your clothes, shivering all the while! All forms of heating are employed—steam, hot-air, hot water and electric—but from the English point of view the houses and buildings are generally overheated. To leave a house heated at 75 degrees and go out into almost zero weather is an uncomfortable experience.

Much of the house and kitchen refuse is now disposed of by means of an incinerator. Adjacent to the sink there is a small flap in the wall opening into a flue, down which refuse is thrown into a small furnace designed to consume cans and all types of semi-indestructible material. This furnace is, of course, located in the cellar.

A clothes chute is another very desirable item, and as the laundry is located in the cellar the chute is usually designed to descend into it, some form of basket receptacle being in place to receive the clothes. Practically all washing machines are now electric, which, in this country, have reached a high standard of efficiency.

The much-discussed subject of closets and cupboards is usually well solved. Every bedroom has a large full-height closet, the partition wall being returned so as to make each cupboard flush in the room. One wonders why in English homes we do not make such a sensible provision for closets. The plumbing work in an American house is usually expensively done, copper being extensively used. Lead is not easily obtainable and is very expensive.

One could use a lot of space for detailed descriptions of interesting practical and decorative features of the American house, but it has been the idea to give just a general and informal description of an interesting subject. Small house competitions are very popular and are sponsored by all types of architectural and home magazines. I have not said anything about large houses, as this is a subject in itself. The number of really large, fine houses built in America in recent years, and the variety of their styles, is astonishing.

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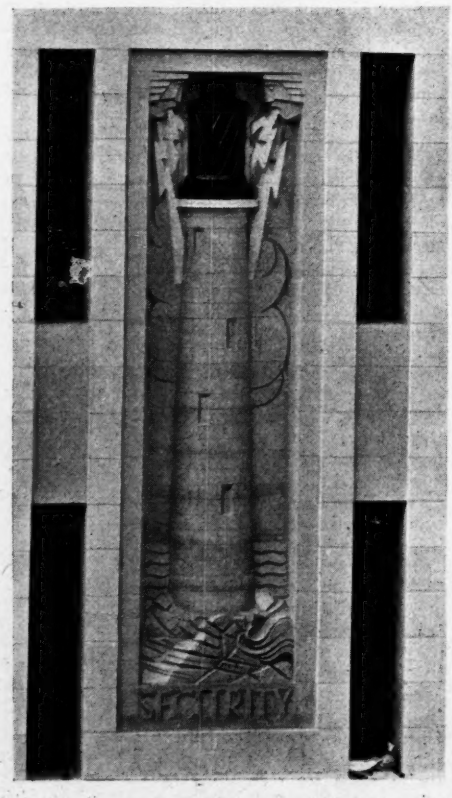
**Bridge and Structural Engineering Congress.**

The Prime Minister has appointed Professor Sir Thomas Hudson Beare, B.A., B.Sc., D.L., M.Inst.C.E., M.I.Mech.E., M.I.Struct.E., University of Edinburgh, to lead the British Government delegation at the first International Congress of the International Association for Bridge and Structural Engineering, which is to take place in Paris from May 19 to 25. The other British delegates are:—Professor R. V. Southwell, F.R.S., University of Oxford; Mr. C. S. Chettoe (Ministry of Transport), Mr. J. W. Spiller (one of the Chief Engineers for the Crown Agents for the Colonies), and Major R. F. Maitland, O.B.E., Secretary of the Institution of Structural Engineers.




**Lighthouse Panel on "Abbey House," Baker Street, N.W.**

Mr. Donald Gilbert, Sculptor.

# THE DESIGN OF BROADCASTING STUDIOS

Mr. Raymond McGrath, B.Arch., A.R.I.B.A., read a paper on "The Architecture of Broadcasting Studios" before the West Yorkshire Society of Architects on March 17.

Broadcasting, as a science and an art, had made prodigious strides in the last ten years, said the lecturer. The power increased inevitably. Its workings remained a mystery to many. There was something uncanny about a man sitting alone, but hardly alone, talking to four million listeners. Sound control was, of course, the governing factor in the design of broadcasting buildings, and for that reason the location was of considerable importance. In the first place, all outside noises had to be excluded. Obviously an unrestricted and not a city site offered the greatest planning advantages and also reduced the building cost. Transport facilities for artists, however, particularly in large cities like London and New York, restricted the choice of a suitable location. In London the new Broadcasting House was at the head of Regent-street in the West End, on a site which had severely tested the resource of the engineers. In New York the disadvantages of the city site, surrounded by heavy traffic, would, no doubt, be largely overcome by placing the studios many stories above ground level, as in the projected Radio City. Outside the city it was still important to insulate against air-borne noises. Aeroplanes set up structural vibrations in a building and the roof might act as an amplifier. The roofs of the Berlin broadcasting studios were insulated against aeroplane noise, the roof trusses being bedded on fibre. Structure-borne noises presented considerable problems. Vibration was easily transmitted through solid and continuous members of a structure, and it was often found that resonant vibrations were setting up sound waves in positions very remote from the original source. Steel framing behaved in that way and was usually avoided in studio construction. Nevertheless, the new Berlin studios were steel-frame construction and great care had been taken to isolate the steelwork by the use of permanently resilient materials. In Broadcasting House the architect had arranged that all the studios were placed in a central brick tower with 42 in. brick walls separate from the surrounding steel-frame offices. In that tower, wherever possible, buffer floors of libraries or stores were interposed between the studios.

Apart from the general considerations of planning and structure, the type of floor, wall and ceiling construction was all important and would be best considered in relation to the architectural acoustic treatment of the studios themselves. The most logical manner was to surround the broadcasting studio with a shell of building devoted to ordinary purposes, *i.e.*, offices, board-rooms, etc. That necessity concealed the function of the building and presented a serious problem in architectural expression. Except as seen from the air, there was nothing but a slender mast to indicate that the Berlin building was devoted to broadcasting. That disadvantage was realised at Broadcasting House, hence the lattice masts to identify its purpose. Those aerials were used only for reception of the Corporation's own transmissions. Hence also the sculptures of Ariel on the façade.

It was worth while, said the lecturer, to examine in detail the new buildings in Berlin and London in order to appreciate the trend of design. Unlike Broadcasting House on its West End site, the Berlin Haus des Rundfunks was on the town boundary opposite what is known as the Radio Garden, an exhibition quarter of Berlin corresponding to the London White City. It had little of the classical graciousness of many of the excellent modern buildings such as Mendelsohn's Metal-workers' Union. It was a grim block with the appearance of a warehouse, riddled with windows, so that, like Broadcasting House, its function was not at once obvious. Viewed from the air, however, its grouping was impressive and its planning expressive. The architect was Professor Hans Poelzig. Unlike the studios of Broadcasting House, which were piled up in the form of a tower alternating with insulated floors, the Berlin studios were spread out in three radiating blocks flanked by open courtyards and surrounded and cut off from street noises by a cordon of offices. The arrangement on plan appeared to be excellent, and if the building were better constructed would no doubt be highly successful. As it was, the bad acoustics of the excessively long corridors and the five-story glazed brick entrance hall set up more internal noises than those which needed to be coped with from surrounding streets. The banging of flimsy doors and the clatter of footsteps were surprising in a building where one expected silence to be golden, and yet, despite those defects in the public parts of the building, elaborate, even successful, precautions had been taken to insulate the studios themselves from the remainder of the structure. In order to exclude ground vibration noises from the studios, the steel stanchions had fibre slabs embedded between the bases and the concrete, and, in addition, all bearing supports on the ground floor were insulated. Where one studio was placed above another the steel framework was entirely insulated by quilting, so that there was little transference of sound through the steelwork, and since the piercing of walls for wiring might have seriously affected their sound-proofing, the precaution was taken of laying all cables in wax-filled lead tube. Water supply and central heating pipes were also insulated.

Broadcasting House, London, had in all twenty-two studios, ranging in size from the concert hall, or Studio No. 1, of 150,000 cubic feet, to the Debates Studio, of 2,200 cubic feet. These studios were designed for a variety of purposes—vaudeville, dance music, orchestral music, religious services, debates, talks, news announcements—and the treatment of each studio varied according to the requirements. A listening and a silence room adjoined each of the larger studios. The listening rooms were equipped with a loud-speaker and were in communication with the control room. They were used by the producer to balance the performers in their relation to the microphone, which he did by listening to the loudspeaker. The silence room contained a microphone which enabled announcements to be made to the studio. In addition to the various sectional controls throughout the building, there was the large control room on the eighth floor, where the programmes were received, controlled, and passed on to their particular destinations. Sound-proof cubicles, occupied by specially trained musicians, were provided for the control of important musical items. There were also dramatic control rooms, containing "fade-units," whereby ten sources, such as studios, outside broadcasts, etc., might be mixed for dramatic purposes. Briefly, that was what Colonel G. Val Myer, the architect of Broadcasting House, had to cope with. He had collaborated throughout with the B.B.C.'s Civil Engineer, Mr. M. T. Tudsbery. The interior architectural treatment of the studio groups was very different from that of the Rundfunkhaus. The supervision of the interior work had been entrusted to him (the lecturer) as decoration consultant. He had been working in collaboration with three other architects, Mr. Edward Maufe, Mr, S. Chermayeff, and Mr. Wells Coates. The interior of the concert-hall was the work of Colonel Myer.

### Acoustics.

The acoustic and technical design of the studios was, of course, entirely in the hands of the B.B.C. Engineering Branch. The lecturer offered certain acoustic information purely as an indication of problems of studio design which in their turn increased the problem of decoration, with which he was concerned. The information, gathered from various sources, was not claimed to be strictly accurate.

The studios at Broadcasting House had been designed for a reverberation period slightly less than that desirable for direct listening, on the assumption that the reverberation of an average listener's room was added to that of the studio. Another reason was that the microphone increased the apparent reverberation. The Broadcasting House studios were also to possess reverberation independent of pitch. The lowest pitch that could be sensed as a tone was 20 cycles per second, the highest was 20,000 cycles per second. In the studios the measurement of the reverberation period for all frequencies between 40 and 10,000 cycles per second was required to give a level curve. Actual measurements were usually made from 100 to 6,000 cycles. Though the reverberation period was a constant for any particular frequency in a particular studio, it did not remain constant unless the absorption properties of the materials used in the treatment of the studio also remained constant. Consequently the sound-absorbing materials proportioned to give the required reverberation period must have a constant coefficient of absorption for all frequencies. Given the coefficients of absorption for all the materials in the room the reverberation period might be calculated.

For music a period 20 per cent. longer than that required for speech usually gave the best results, but in the case of broadcast talks it was considered advisable to add no reverberation, modifying the transmission only by the reverberation of the listener's own room. That was being done in the regular news studios at Broadcasting House by lining walls and ceiling with 4 in. of rock wool. Except for the possible undesirable effect of a dead studio on accustomed persons, the same could be done in the talks studios. For dramatic effect the reverberation must be extremely elastic. The effects studio was therefore made completely dead, and all reverberation was added artificially. Besides reducing the reverberation to the desired period, it was very desirable that a music studio should possess controlled resonating properties, with resonance over the full range of musical pitch. This condition might be achieved by the selection of materials. Highly polished surfaces increased reflection and brightened the tone. The reflecting materials were arranged in panel form, and, apart from this, it was of course essential that floor, wall and ceiling construction should be absolutely rigid and solid, so that there was no tendency for large surfaces to act as a diaphragm. That diaphragm effect, as well as "room resonance," were guarded against by designing the studio with its long walls out of parallel. That was common practice in Germany. The studios at Broadcasting House were also, in most cases, planned as irregular quadrilaterals. The general construction of the studio was similar to that of other structures which required to be sound-proof. The observation windows were double-glazed, using a glass with little flexibility. In the basement studios two sets of doors were provided at each exit, forming a bulkhead. Those had a highly reflecting surface and were designed to be reasonably airtight. In addition to the requirements for adequate lighting, a system of signal lighting was installed, using red, blue, green, white and yellow covers. Provision had to be made for house 'phones, buzzers, removable microphone skirting, etc., so that it would be seen that, in addition to the "response of the atmosphere," it was not a small task for the architect to ensure the right visual response of the surroundings which no doubt would be more and more demanded by the artists To ensure that response the lighting must be generous and carefully disposed. The colour should be bright and fresh, particularly as the neutral tones of untreated building boards would usually predominate. Too great a stress was not to be laid upon "restfulness" so long as there was harmony. After all, the artist was at work, not at leisure, and the first essential was to vitalise him.

# HOW TO "VET" A HOUSE.—I

By GEORGE O. SCORER, F.R.I.B.A.

WIDE is the scope of knowledge required of the modern architect. Schools and offices turn out the theoretically fully-fledged practitioner, but an early possession of the proud title of A.R.I.B.A. does not carry with it the golden qualification of experience.

Among the many branches of his profession with which the architect will be called upon to cope is the "vetting" of houses. It is a difficult subject, but, granted always that experience alone can produce the perfect "vet," a good grounding in the essentials must lead, obviously, to a quicker perfection, and in the following articles an "old hand" passes on to the new hand at the job his own alphabet and grammar of "vetting."

**Preliminaries.**

A client having called for a report upon a property which he is desirous of acquiring, the architect's first step should be to get a clear understanding as to the exact scope to be covered by the report, and to obtain all available data, including plans, prior to his actual inspection. The importance of closely studying a client's views and needs can hardly be over-stressed.

The terms and conditions of any proposed agreement must be scrutinised with a view to ascertaining whether the property is freehold or leasehold; whether there are tithes or ground rent; whether repairing covenants are reasonable or onerous, and the dates upon which they have to be complied with. Restrictions, easements, and any clauses which appear to call for investigation when making the survey, should be noted.

Particulars of the purchase price (or of the rent, and of any premium demanded) should be ascertained, together with the rateable value of the property. Make sure that vacant possession of all buildings comprised in the estate, including cottages, is guaranteed by a fixed date. In the case of country-house property, an ordnance map should be consulted, so that any rights of way may not be overlooked, as these may detract seriously from the value of the estate.

Satisfy yourself that there is nothing to prevent the particular use to which the property is destined, and, where alterations or additions are proposed, that they can be carried out without risk of infringement of the rights of adjoining owners in respect of light and air, or of contravention of building acts or by-laws.

In the case of house property destined by the client for conversion into flats, or for structural alterations, it will be necessary to decide what licences would be required, and whether there is any doubt as to their being granted. It should be remembered that on many estates, particularly in the London area, conversion, even of freehold property, is not permissible. A belief that there can be no restriction upon freehold property is quite a common error, and the client may share in it.

The client's instructions should be taken as to the preparation of schedules of dilapidations and of landlords' and tenants' fixtures, and as to whether the schedules are to be priced. The scale of professional fees and charges laid down by the Royal Institute of British Architects should invariably be brought to the client's notice, and his approval thereof obtained at an early stage of the proceedings. When a fixed fee is mutually agreed upon it is essential that the precise nature of the services to be covered by the fee in question be carefully defined.

Having secured definite instructions and all possible data, the next step is the actual inspection of the property, including the house, outbuildings, garden, paddocks, boundaries, roads, paths, etc. Bear closely in mind that the client needs a clear and definitely expressed statement of opinion, and not a confusing list of merits and defects. A report should be concise; major faults and drawbacks should be given in detail, but the full notes made on the spot must be reduced to a précis.

Begin with a general external inspection, keeping eyes, ears, *and* nose intelligently alert; the job in hand will need all your attention and concentration.

Range round the place; find out if the house is too exposed to wind, or if it is too low-lying, too closely surrounded by trees, or in an area where mist or fog is likely to be prevalent. In the case of country or suburban property, is the house too near the public roadway to ensure privacy, as well as freedom from dust, noise, and traffic vibration? Is the neighbourhood an improving or a deteriorating one? In this connection a large percentage of properties to be let or sold is significant. If the house has been vacant for any considerable time, ascertain the reason. There may be a prejudice against it on account of some objectionable history.

Extensive frontages to public roads have a prospective value from the point of view of future development, and may explain why a higher value is set on the property than at first sight appeared justifiable.

Ascertain the nature of the soil and subsoil; the level to which ground water rises in winter; and whether there is any risk of flooding from the proximity of a river or other cause. Apart from the disposition, planning and condition of the various buildings on an estate, there are many matters to which it may be advisable to call attention when drafting a report. For example:—

Is there any likelihood of present amenities being spoilt by estate developments by adjoining owners; by the erection of buildings, such as shops, garages, housing schemes or cheap bungalows; or by the cutting of new roads?

Is there any objectionable feature, existing or projected, sufficiently near to cause a nuisance, such as any of the following: public garage, car park, forge, dairy, school, music-school, workshop, factory, public-house, railway, tube-railway, tramway, tannery, pig-farm, slaughter-house, saw-mill, cemetery, sewage-farm, refuse destructor, dump, pumping-station, kennels, etc.? Is there a power-station in the vicinity, or high-tension cables, likely to interfere with wireless reception?

Obtain particulars as to facilities for shopping, and for sport, such as hunting, fishing, cricket, golf, tennis, etc., as being of interest to the client. Facilities for access to the property by road, rail and motor-bus should be noted. Where there is no public service to and from the nearest town or village, the servant problem may be a difficult one. The distance from the nearest post and telegraph office, and particulars as to existing telephone arrangements, should be ascertained.

Follow up the general look-round outside by a brief run through the house, noting as you go the disposition, planning, aspect and prospect of the principal rooms, not forgetting that a right aspect is of primary importance. If not already provided with plans, a rough ground plan of the house may be sketched with advantage, as well as a key-plan showing boundaries and outbuildings, to facilitate subsequent location of items entered in the notebook. Never hesitate to get all the information you can from the household on details such as water, heating, electric light, and so forth; it may be inaccurate, but it will give you some clues to work upon.

Make sure there is a sufficiency of the right sort of accommodation of every kind, and that the planning and ventilation are reasonably good throughout. A client will not thank you for submitting an enthusiastic statement as to structural soundness if you omit to mention that the principal rooms face north, and that the kitchen and larder look south. Nor would the client be unduly grateful—ultimately—if you left it to him to discover that accrued dilapidations would be a heavy drain on his purse during, and at the end of, his tenancy.

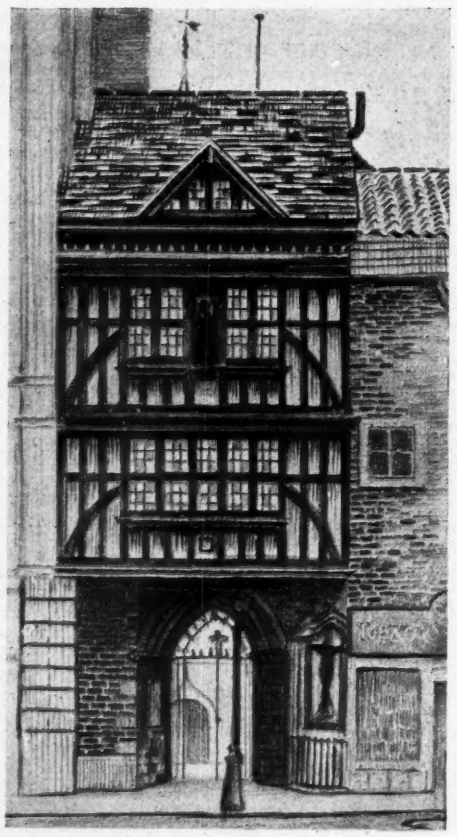
Make it your fixed policy to take nothing for granted, or at its face value; the greater the age of a house, the greater the likelihood of things *not* being what they seem. Suspect everything, therefore (and everyone else's opinion), until you have clearly established its perfection.

Know that the enterprising and unscrupulous not infrequently buy up a house which has suffered from years of neglect; renovate it sufficiently to camouflage its real condition; fill it with furniture calculated to enhance its "charm"; and then offer it for sale. It should not take long to recognise a house "rigged" in this way, though the work is often very cleverly done.

The age of a house needs very careful attention. Perhaps the most difficult class of property to advise upon is that which is on the borderland between "definitely failing" and "repairable." In such cases consider whether the purchase price plus cost of repairs would not mount to a higher figure than the house would ultimately be worth. Old houses seemingly failing may pay for restoration, particularly where there is some historic or romantic interest attached, but they must not have gone too far on the road to ruin. Remember that the cost of repairs to anything like period work is bound to be high, as the greatest care is necessary with it, and only the best of workmanship and materials are admissible if a good result is to be obtained.

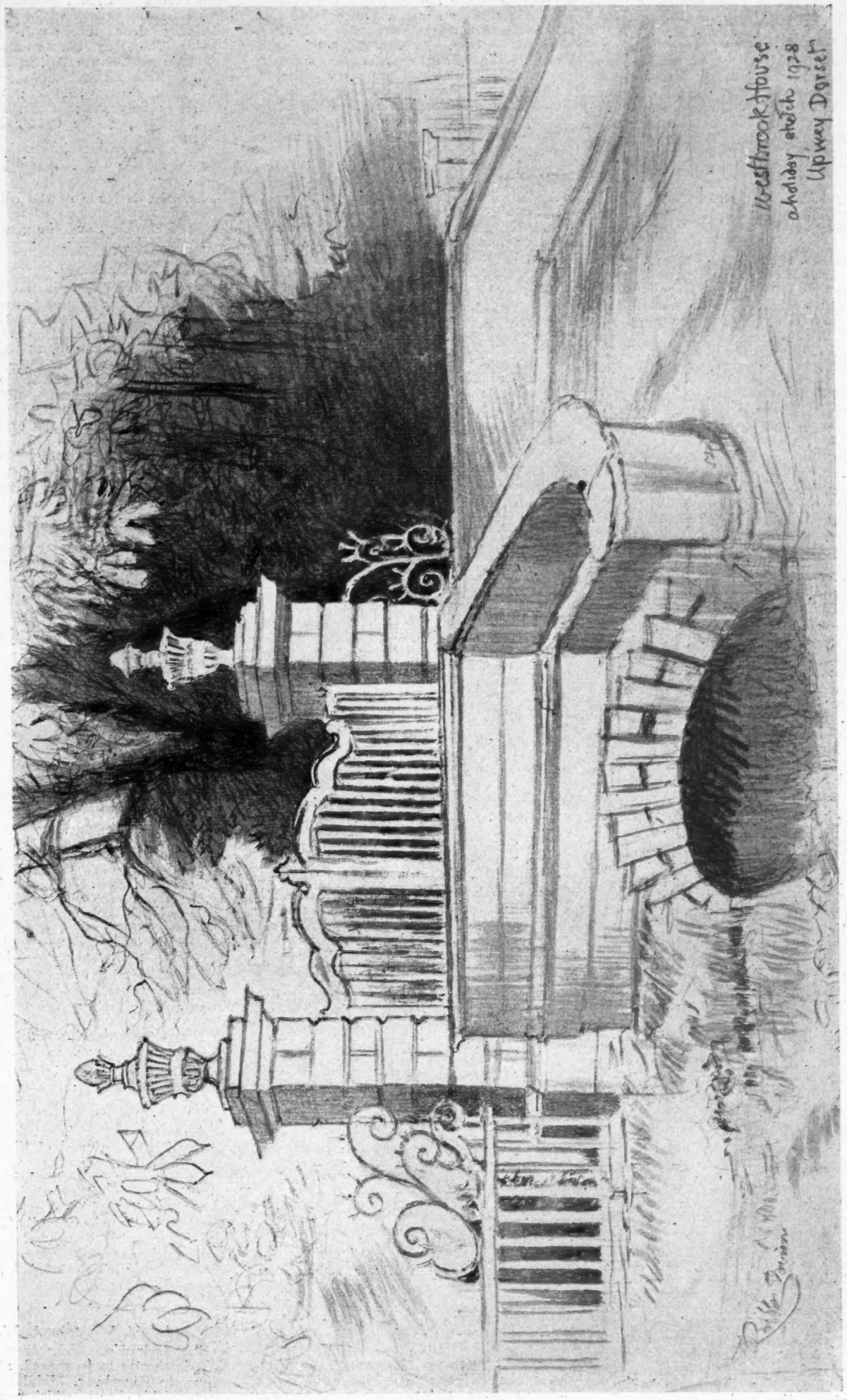
Modernist ideas of comfort and the fitness of things will go a long way to kill the rather hysterical and not too hygienic craze for an old house simply because it happens to be old and picturesque; and, though it is certainly a joy to look at age-darkened oak beams and open timber roofs, there are drawbacks when it comes to actually living amid the decay of ages, in company with an ever-increasing family of death-watch beetles.

*(To be continued.)*



**The Old Gate House, St. Bartholomew's Church, Smithfield, E.C.**

From a sketch by MR. H. GLEDHILL.




From a sketch by Mr. T. Raffles Davison, F.S.A.

# ILLUSTRATIONS

## PLATES.

**St. Mary's Church, Shelton.**

This ancient church, part of which dates back to the eleventh century, has recently been repaired under the scheme for the repair of the Bedfordshire churches. The church had been in a ruinous state for many years. The tower had developed fissures, the leadwork to the roof had cracked, the original glass was badly damaged, and the walling throughout was loose. The repairs extended just over one year, and were carried out in consultation with the Society for the Protection of Ancient Buildings. Every care was taken to preserve the original features and to avoid the addition of new material. Mr. Robert Marriott, of Rushden, an experienced church builder, was entrusted with the work. Mr. P. G. Bentham, A.R.B.S., carved the figure for the Rood beam.

Messrs. Richardson and Gill, FF.R.I.B.A., were the honorary architects.

**Avenue Theatre, Northfields.**

The front elevation of this theatre is designed in a simple and straightforward manner, the style being Spanish. The interior is reminiscent of an old-time courtyard, but without a solid painted so-called "atmosphere" sky. The chief feature is a brocaded bright-coloured awning.

The general level of the site being below the street has allowed the main entry to be midway between the main parts of the auditorium; thus only a short flight of steps leads down to the stalls, and a similar short flight up to the balcony.

Seating accommodation is provided for 1,550, the auditorium being as colourful as permitted by the style adopted, in lighting, furniture and decoration.

The owners are "Walpole Hall, Ltd.," of Bond-street, Ealing, and are building by direct labour under the superintendence of Mr. H. J. Horswell. Though not a steel-frame building, the general steel construction is by Messrs. Redpath, Brown and Co., Ltd.

Mr. Cecil Masey, F.R.I.B.A., is the architect.

**"Lancaster House," Birmingham.**

This new building, which is being erected to the designs of Messrs. Essex and Goodman, FF.R.I.B.A., architects, of Birmingham, will have a frontage of 120 ft. to Newhall-street, and 101 ft. to Great Charles-street. It will be eight stories in height, and will be served by express passenger lift. Skeleton steel construction faced with Portland stone will be used. The building, which will have a lettable area of about 43,000 sq. ft., will be of fireproof construction throughout, and will be heated by low-pressure hot-water apparatus, the boilers being run on fuel oil, and there will be a constant hot-water supply to the lavatories and sinks throughout the building. The entrance vestibule, hall and staircase will be panelled with polished mahogany with marble floors and landings. The general contractors are Messrs. John Bowen and Sons, Ltd., of Balsall Health, Birmingham.

**"Abbey House," Baker-street, N.W.**

The new offices of the Abbey Road Building Society, which were recently opened by the Prime Minister, are an extension of its former premises. The site made possible a new building that economically embraces the old, which is now the south wing of the new building, and a little less than a third of the size of the complete structure.

The front elevation is faced with Aberdeen granite and Portland stone; the north and south wings continue the treatment of multi-colour brick, and the main roofing is of green glazed Roman pattern tiles. The Society's emblem of a lighthouse is incorporated above the main entrance. The clock tower, rising to a height of 150 ft. above the pavement level, has a peal of bells. The main entrance to the head office is in the centre of the Baker-street façade, directly opposite the Underground Station, and is flanked by shops having ground floor and basement accommodation, and available for letting. In addition, other portions of the building from the third to the seventh floors provide modern and well-planned office accommodation, which the Society will also place at the disposal of approved tenants, together with the passenger lifts, central heating and the other amenities of the building.

The centre of the ground floor is occupied by the banking hall, which is directly accessible from the street through the main entrance. This hall has a superficial area of about 5,000 ft. Counter space is arranged to offer members every facility for the speedy transaction of business. The banking hall, which rises to the height of the second floor, is entirely carried out in Subiaco and Zola marble, giving a warm and rich effect to the walls. The barrel vault of the roof is glazed with prismatic glass, giving a sparkling effect to the ceiling. The coats of arms of the towns and cities where the Society has offices are represented in stained glass let into the windows of the hall. Communicating strong-room doors lead directly into the old banking hall, which is to be occupied by the Society's head office bankers, a special facility enabling the Society to make cash lodgments without the risk of a street sortie.

The ground floor of the north wing is occupied by the Advance Department, and there are five interview rooms ensuring complete privacy for callers. An entirely new feature of the building is the creation of a sub-basement. Here is garage accommodation connected by an hydraulic lift on the Park-lane elevation in the rear for the special use of the Society's cars and by tenants who wish to rent handy garage space. The heating plant and the Society's stationery department are housed in this sub-basement. There are archives stores and paper rooms.

The lower ground-floor contains the series of strong rooms holding securities of a value exceeding sixty million sterling. The Registry and Dispatch Branch is also on the lower ground floor. There is sound-proof accommodation for the Society's Addressograph machines and their operators, and a conveniently situated audit room.

The board room is situated at the rear of the building, where it has quietude and privacy. The room is panelled in silver grey English oak, beautifully figured, the raised panels banded with Indian silver greywood, and finished with a skirting of macassar ebony. Let into the windows are coloured motifs representing "Fortune," "Industry," "Prosperity," "Strength," "Justice" and "Commerce."

Messrs. Walter Lawrence and Son, Ltd., were the general contractors, and the following specialist firms were engaged on the work:—Moreland, Hayne and Co., Ltd., steelwork; The South Western Stone Co., Ltd., Portland stonework; Fenning and Co., Ltd., granite work; The General Asphalte Co., Ltd., asphalt; Ames and Finnis, Ltd., green Lombardic roof tiling; J. Whitehead and Sons, Ltd., marble work; Mr. Donald Gilbert, carving; John P. White and Sons, Ltd., wall panelling; Turpins Parquet, Floor, Joinery and Woodcarving Co., Ltd., wood block flooring: The Crittall Manufacturing Co., Ltd., steel windows; Waygood-Otis, Ltd., lifts; J. Starkie Gardner, Ltd., bronzework and lift enclosures; Rosser and Russell, Ltd., heating, hot water and ventilating system; Engineering Works (Electrical and General), Ltd., electrical work; Mathew Hall and Co., Ltd., drainage and internal plumbing; Alfred Williams and Co., Ltd., artesian well; Diespeker, Ltd., terrazzo pavings, wall lining and partitions; Hobbs, Hart and Co., Ltd., strong-room doors and ventilators; J. A. King and Co., Ltd., semi-circular light and lantern over banking hall, supplied and constructed with high-relief "Cristol" glasses; ornamental electric light fittings, also constructed with high relief "Cristol" glasses; fireproof floors, constructed with "King" self-centreing floor tubes; J. Binder, lead lights; The May Construction Co., Ltd., accoustic plastering; Gillett and Johnston, Ltd., tower clock and chimes; Gilbert Seale and Son, fibrous plaster; Synchronome, Ltd., electric clocks; Fredk. Sage and Co., Ltd., metal screens; Carter and Aynsley, Ltd., ironmongery.

The architects are Mr. J. J. Joass, F.R.I.B.A., and Mr. Daniel Warry, who was associated with the late Delissa Joseph, F.R.I.B.A., designer of the earlier "Abbey House." The clerk of works was Mr. Leonard Buckley, and the general foreman, Mr. Frederick Marsh.

**Cottage at Pett, Sussex.**

Recently completed at the top of Chick Hill, this cottage commands sea-views on the south and east, Fairlight to west and Winchelsea on the north. The walls to ground floor are 11 in. hollow, of local brick and limed, and 9 in. on first floor, with vertical tile hanging. The roof is felted and covered with dark sand-faced tiles, with tile valleys and bonnet hips. Metal casements in wood frames with diamond pane leaded lights are used. All joinery is of elm or oak, with hand-made oak latches to doors, and special attention has been given to the living-room, which has oak adzed ceiling beams, oak and elm staircase, and red brickette Tudor fireplace. Every effort has been made to preserve harmony with the surrounding country and to retain the character of the Sussex style of architecture. Sanitary fittings were by Messrs. Rownson, Drew and Clydesdale, metal casements by Haywards, Ltd., and the general contractors were G. H. Colegate and Son, of Pett.

Mr. Arthur T. Davies, L.R.I.B.A., is the architect.

**Proposed Cottage at Stansted, Essex.**

The chief interest in this cottage is the planning to afford the greatest amount of "labour saving," comfort and convenience. There is only one open fire in the whole house, this being in the sitting-room, while the dining-room is heated by a gas fire in addition to a radiator; central heating throughout is supplied by a boiler in the kitchen in a suitable position. All bedrooms have built-in wardrobes and dressing-table fitments, and there is a cupboard servery with through drawers between the dining-room and kitchen. The exterior is built in rustic facings, the upper half being covered with rebated oak weather-boards left to weather, while the roof is covered with brown sand-faced handmade tiles; the gabled projection is finished in white cement on expanded metal and wood framing.

Mr. John Leech, A.I.A.A., of Stansted, Essex, is the architect.

**A Small Suburban House.**

This house, which is illustrated on page 585, has "balanced" elevations, the walls being built in 11 in: cavity work in multi-covered facings up to first-floor window-sill level; here the walling is 9 in. solid and cement rendered, set back 2 in. from face, with two courses of tiles projecting to form a ledge. The eaves are wide, with plastered soffits, and the roof is covered with glazed pantiles. The windows are painted in "ivory" and the exterior doors and shutters in "apple green." The planning is on labour-saving lines, and with a view to economy in construction.

Mr. John Leech, A.I.A.A., of Stansted, Essex, is the architect.

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**St. Andrew's, Wells-street, W.**

St. Andrew's, Wells-street, Marylebone, W., is shortly to be moved, almost stone by stone, to Kingsbury, Middlesex, seven miles away. This church, which was built in 1847, is an example of Victorian Gothic architecture. Further particulars were given in our issue for March 11.

St. Mary's Church, Shelton, Bedfordshire, as recently repaired: West Front.

MESSRS. RICHARDSON AND GILL, FF.R.I.B.A., Honorary Architects.

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View in Nave, Looking East.

View Looking Into Chancel.

**St. Mary's Church, Shelton, Bedfordshire, as recently repaired.**

Messrs. Richardson and Gill, FF.R.I.B.A., Honorary Architects.

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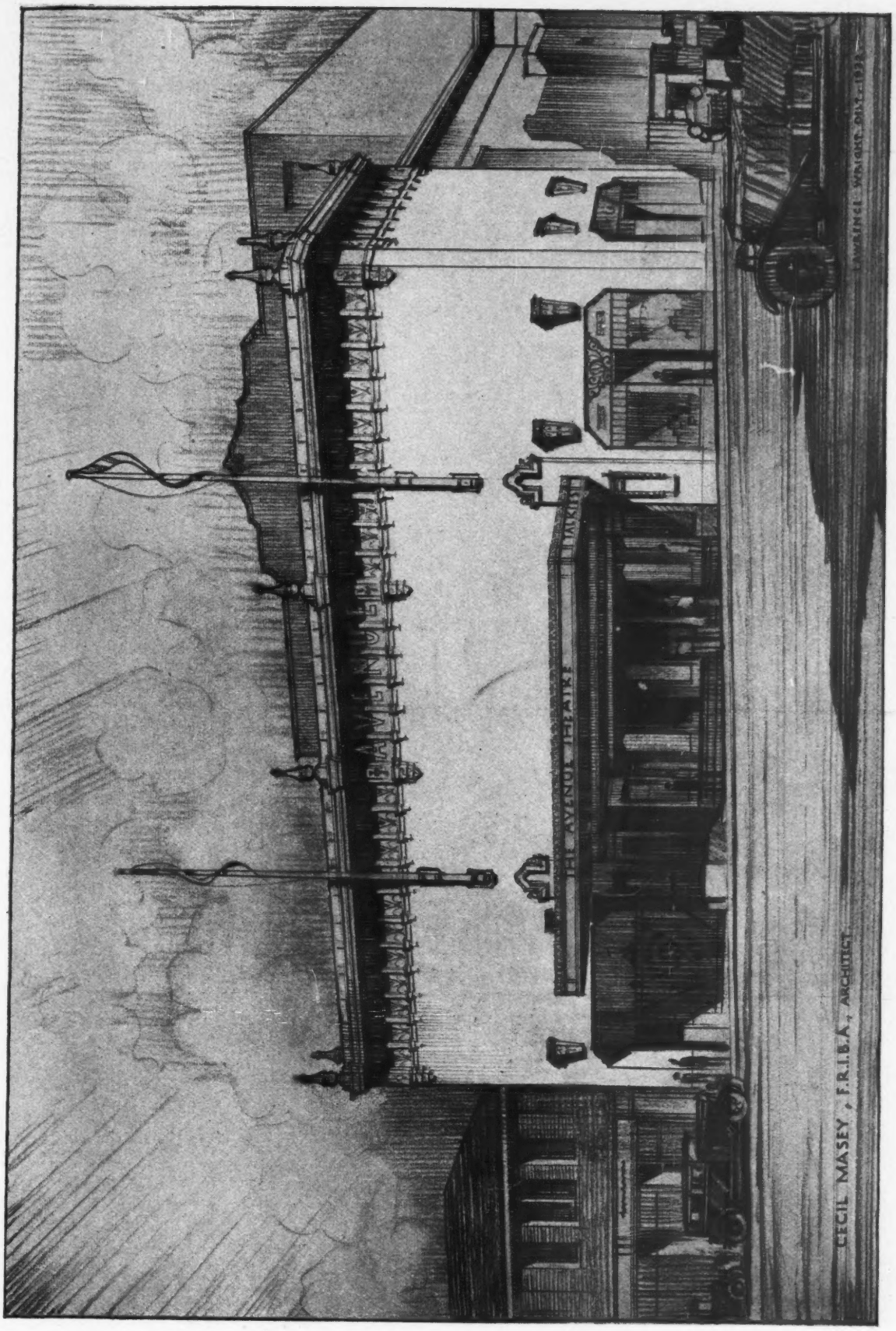


The Avenue Theatre, Northfields.

Mr. Cecil Masey, F.R.I.B.A., Architect.

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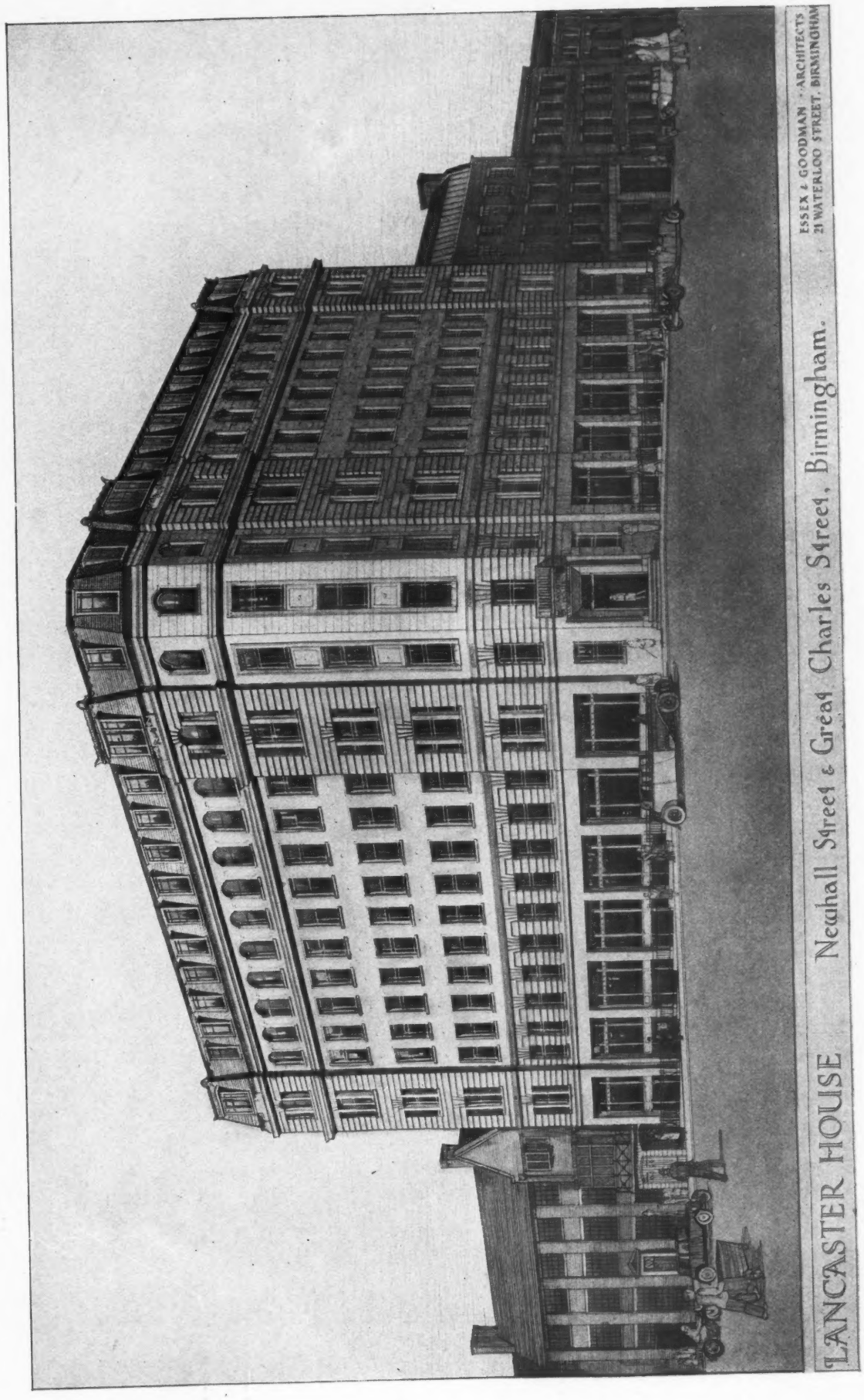
LANCASTER HOUSE
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**"Abbey House," Baker Street, N.W.**

MR. J. J. JOASS, F.R.I.B.A., and MR. DANIEL WARRY, Associated Architects.

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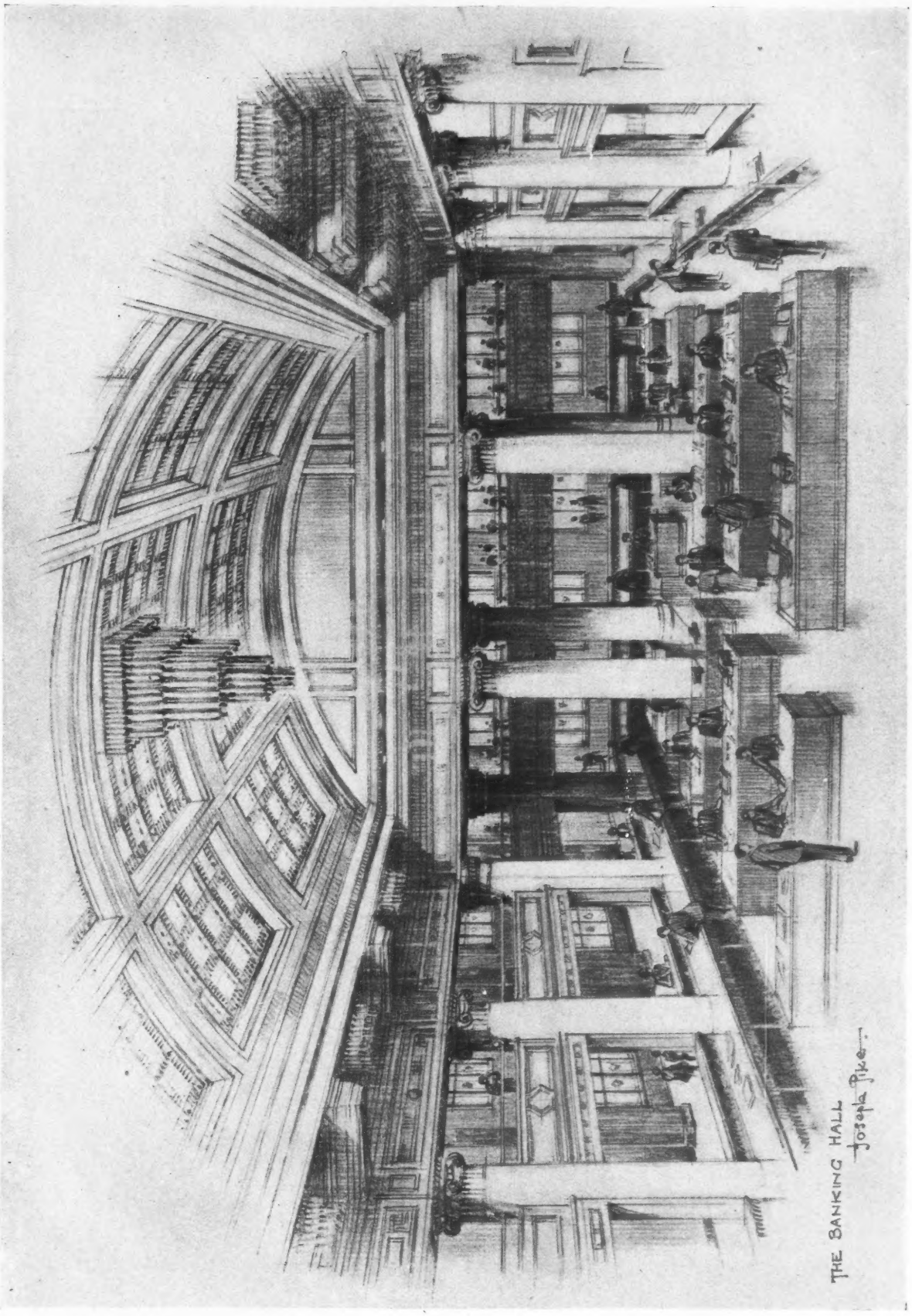


"Abbey House," Baker Street, N.W.: Main Banking Hall.
Mr. J. J. Joass, F.R.I.B.A., and Mr. Daniel Warry, Associated Architects.

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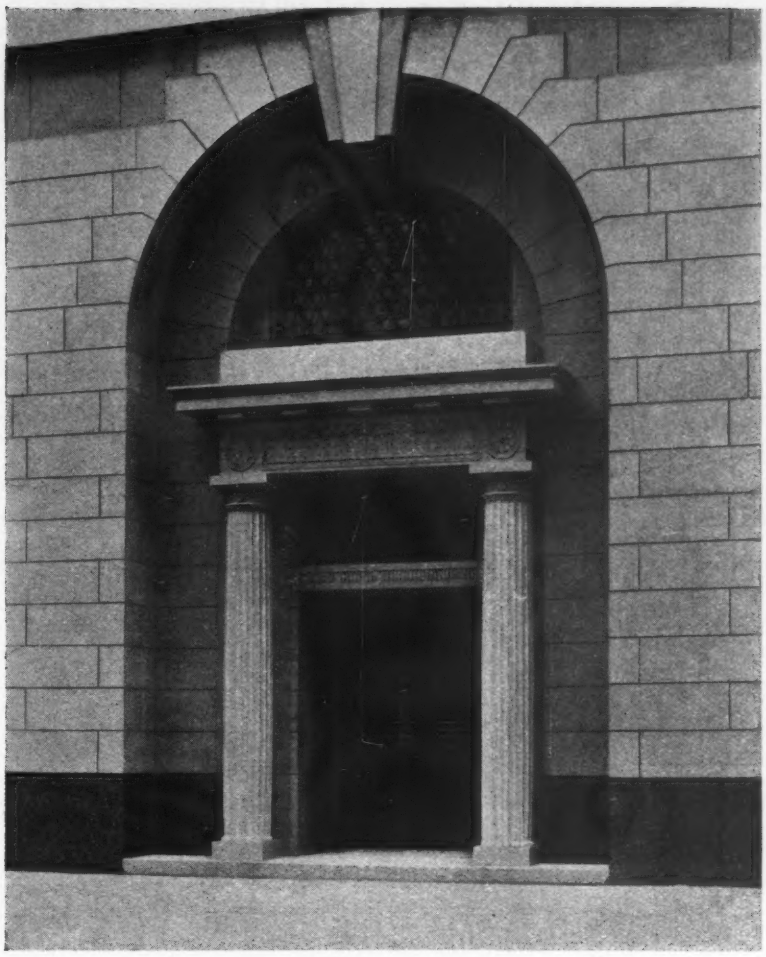
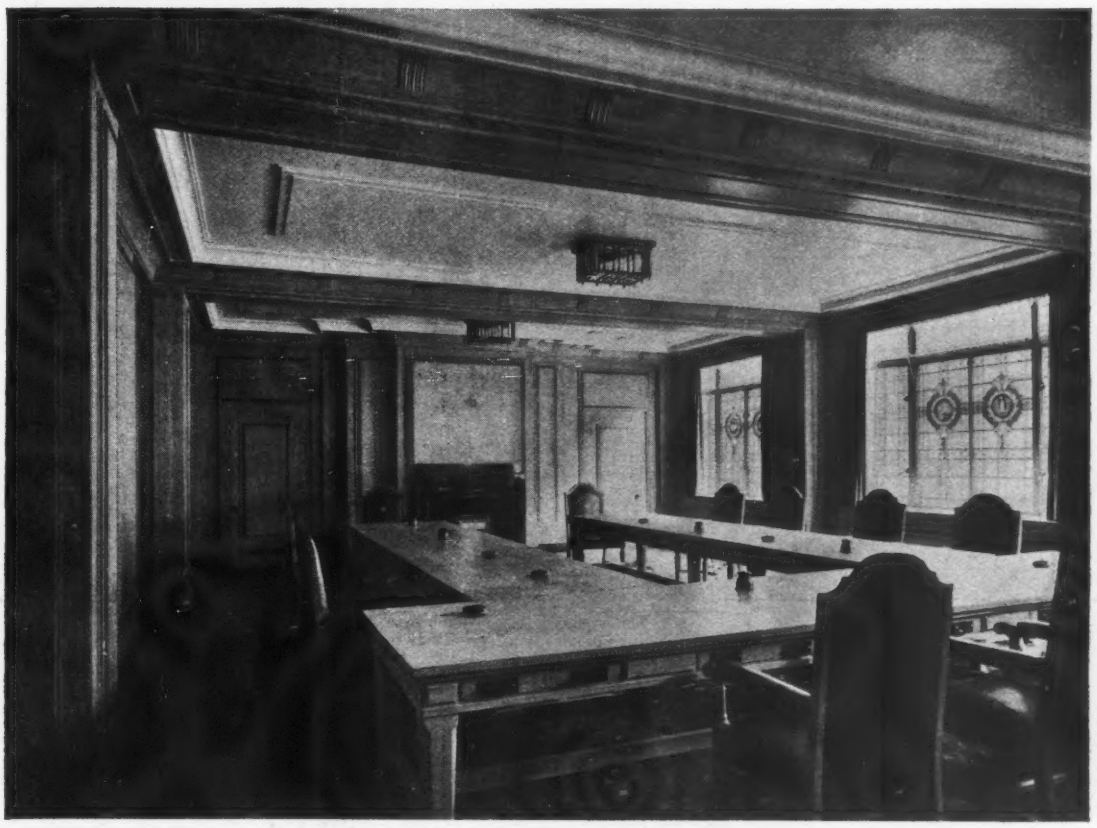


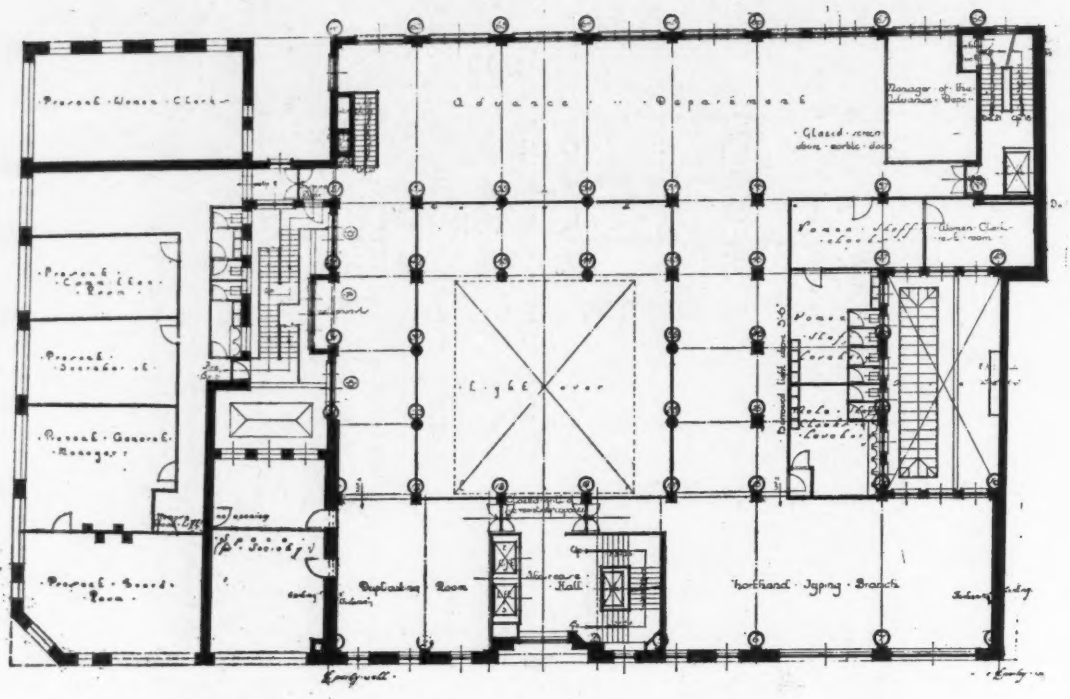
Detail of Entrance.



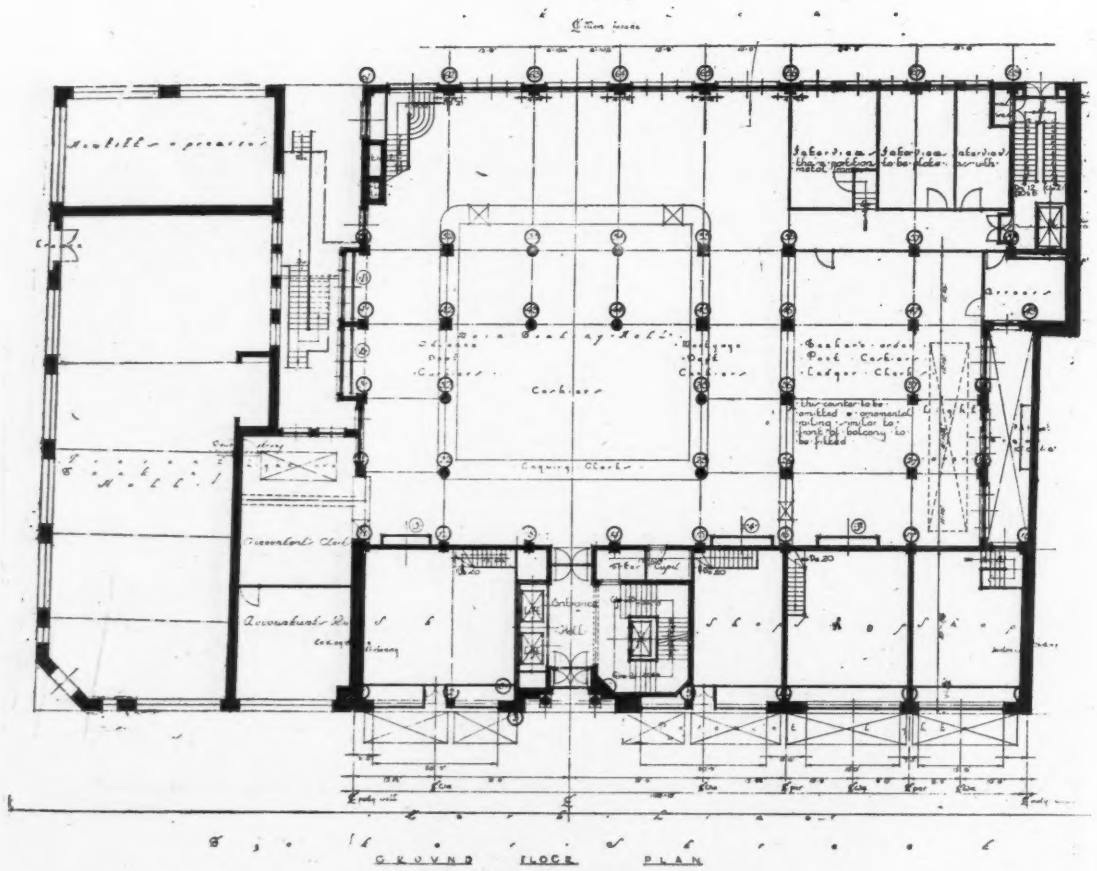
Board Room.

**"Abbey House," Baker Street, N.W.**

Mr. J. J. Joass, F.R.I.B.A., and Mr. Daniel Warry, Associated Architects.



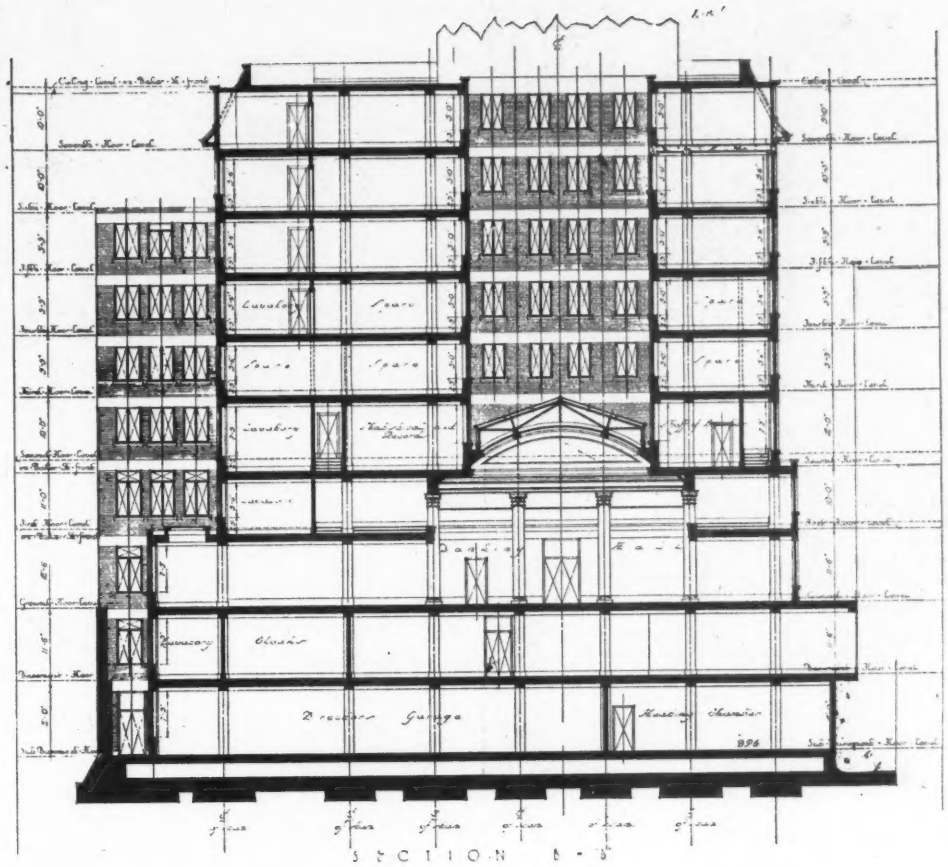
FIRST · FLOOR · PLAN



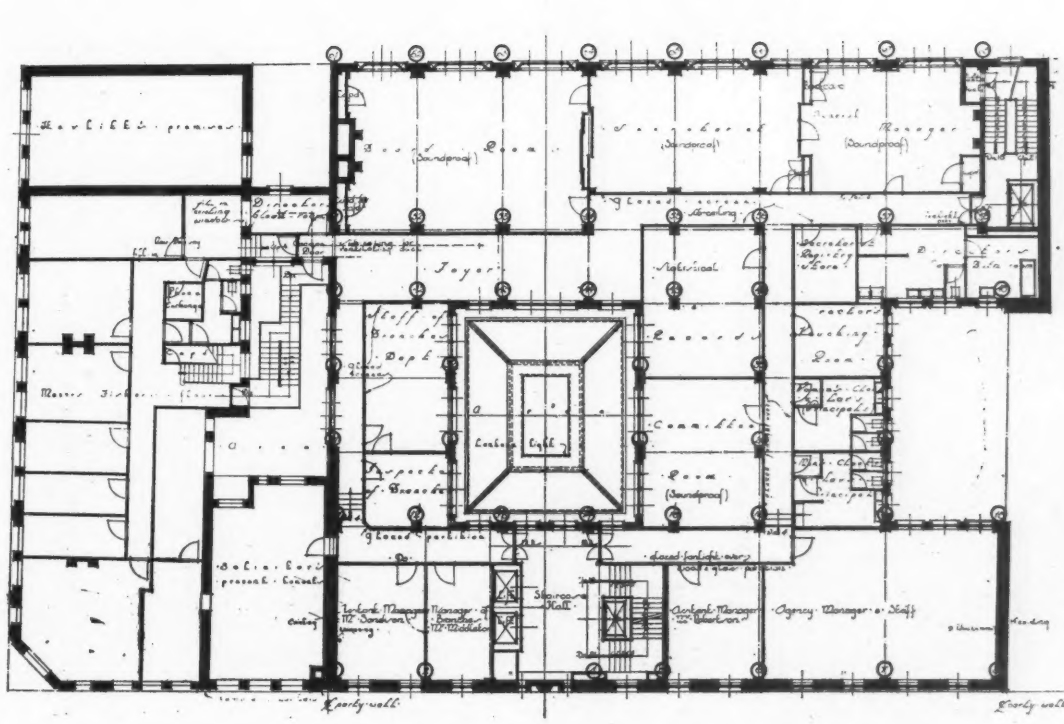
GROUND FLOOR PLAN

**"Abbey House," Baker Street, N.W.**

MR. J. J. JOASS, F.R.I.B.A., and MR. DANIEL WARRY, Associated Architects.



SECTION A-B



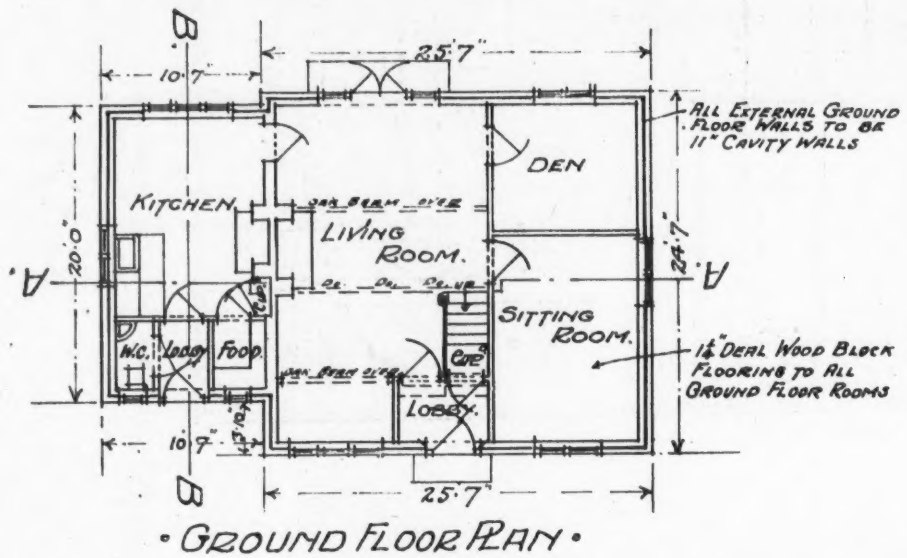
SECOND FLOOR PLAN.

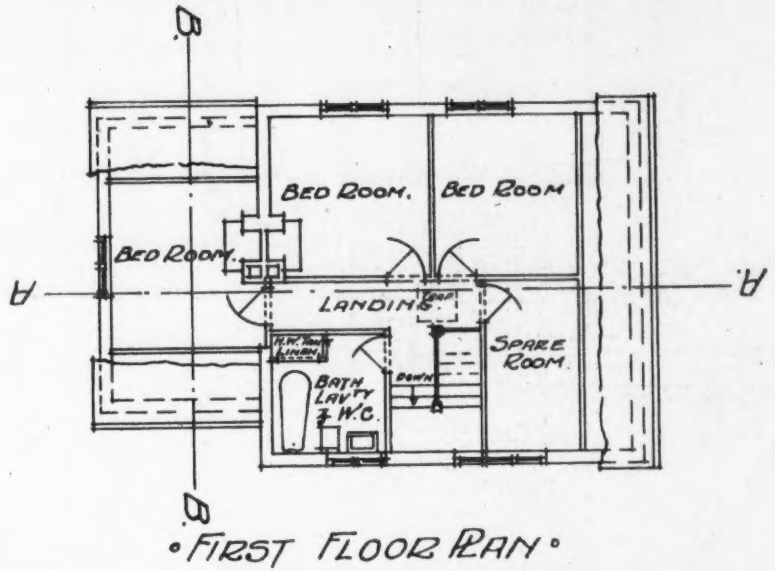
**"Abbey House," Baker Street, N.W.**

MR. J. J. JOASS, F.R.I.B.A., and MR. DANIEL WARRY, Associated Architects.

Garden Front.

Entrance Front.




**Cottage at Pett, near Hastings.**

Mr. Arthur T. Davies, L.R.I.B.A., Architect.

**Proposed Cottage at Stansted, Essex.**

Mr. John Leech, Architect.

# MASONS AND SCULPTORS IN MEDIEVAL FRANCE

Mr. Gardner has succeeded in producing what so many people are trying to do—a really interesting and valuable book,* of equal appeal to builder, workman, and architect, covering as it does the period in history when craftsman and designer were most intimately connected. It stresses historical significance without unduly pressing it; it resists the temptation to cram theories into frames that cannot always hold them; and, which matters most of all, it continues readable and inspiring throughout. The title is deliberately chosen; it is not "Medieval French Sculpture," since nationality, as the author reminds us, did not exist at an age when one marriage could transform the complexion of a province, and when alien influences pressed in with the spear points of invading hosts. Thus Classical, Northern and Eastern traces may be followed through the first millennium to the eleventh century, and then on through the wonderful flowering of the next three hundred years.

The book is planned chronologically, and the text is supported by lavish and admirable illustrations, practically all taken from originals, and these clearly demonstrate the Saracenic influence that pervaded France and Spain up to and during the eleventh century. It is particularly interesting to compare these differences with our own Norman Romanesque. Mr. Gardner suggests, as a rough division, (1) the monastic sculpture of the South from the fifth to the beginning of the eleventh centuries, including the Romanesque schools; (2) the eleventh to the end of the fourteenth centuries, the national popular civic art of the North, usually called Gothic, followed by (3) the individualistic and aristocratic sculpture of the late fourteenth to sixteenth centuries.

In this early period we may note the abandonment of figure sculpture, an omission that was not merely due to incompetence, "The iconoclastic notions endemic in parts of the East . . . not only overwhelmed the Hellenistic art of the Eastern empire, but had their reflections in France." At the same time, Mr. Gardner reminds us that the North, also, is inclined to favour non-representational art, thus the definitely representational work that is sympathetic to the middle European took some time to re-establish itself. By the eleventh century, Christian imagery was again in full favour, and, leaving the early period, Mr. Gardner chooses an illustration outside France to mark the new epoch. The portico of the Compostela at Santiago (1183) exercised an outstanding influence over Western Europe. This magnificent group of figures shows an individualism and dramatic quality that is far beyond the scope of ordinary masoncraftwork. Masons who were capable of such conceptions must have stood out in marked distinction from their daily comrades of the trowel and chisel, and they rank as masters. Works of unusual significance recur throughout the Gothic period, and they remind us that the exceptional artist was not entirely overshadowed by the bigger corporate movement. This is not to minimise the cumulative importance of the countless sculptor-masons who have left, as their only signature, the stones that express their work; such work is integral with the buildings that enshrine it, and emphasises the bones behind the wealth of ornament. As climax to the mid-thirteenth century true Gothic, we might select the Madonna of the Trumeau (pier) at Notre Dame (Plate LXXVI.), which embodies remarkable individual achievement with dependence upon the anatomy of the architecture. The figure is attributed to Jean de Chelles, but, as in most medieval work, the authorship cannot be vouched for.

The end of the thirteenth century sees the beginning of a newer style; in the author's words: "The empty niches (Bourges) mark a departure from the older tradition of the column statue. The statues were placed on the plinth in niches formed by shafts supporting the rich canopy work above them, and this arrangement now becomes the normal one. It is the beginning of the differentiation between purely architectural sculpture and image work. Up till now the building masons seem to have been capable of turning their hands to sculpture as well as to purely constructional features, but henceforward there is a tendency for the mason to provide niches to be filled later by a specialised imager who had concentrated on this part of the work. The result is that after a time sculpture begins to lose something of its intimate association with the building . . ." The gentleman artist of the Renaissance is foreshadowed; the craftworker begins his retrograde steps to the unskilled tradesman.

This transitional phase is in many ways the most fascinating for the student, and it proceeds through the fourteenth and fifteenth centuries. Since Ruskin, it has been fashionable to decry the work of the transition period, but Mr. Gardner has good sense on his side when he maintains that, though the standard was more uneven, and included very bad with both mediocre and excellent, the excellent succeeds in justifying the change. No style in art can stand still, and a stereotyped prettiness had already begun to cloy. Had a change of direction not intervened, deterioration would have overtaken it. Interest in every detail is the secret of Gothic charm, and it is for this reason that mock Gothic has been the most deplorable of all rehash work. In the modern Liverpool cathedral the copy of detail has been avoided, but some lack of spontaneity in the craftwork has, perhaps, deprived the interior of that animation which springs from the tool that is handled with originality, an originality that cannot be conferred in the best drawing designed in the studio away from the tool. Perhaps the greatest weakness of English art school teaching has been the tendency to produce indifferent artists instead of creative craftsmen. The architect also has been too fond of designing the empty niche, to be filled later by an independent firm with something that will "fit"; or, which is little less unfortunate, he will supply full-scale drawings for wood and plaster relief, or for iron scroll work. Within general directions these details are best left to the man with the tool, and it is astonishing how much character can be imparted even by an intelligent country workman.

Returning to the early fourteenth century, the brilliance of individual genius reveals itself in the amazing group of Prophets at Dijon, where the colour is still well preserved. Sluter, the sculptor, deserves to rank with the greatest masters. We have noticed that the sweetness and serenity of early work has become tired; it is now counteracted by a growing dramatic quality—power and passion and the accentuation of pain. Sometimes the results are magnificent, sometimes definitely poor; the safety of the corporate convention has been left behind. Portraiture acquires a growing importance, and elaborate monumental tombs are commissioned by persons of consequence. Renaissance and foreign influences are being introduced and the final flowering of the Flamboyant Gothic marks the end of its own period. Nowhere is this embodied more triumphantly than at Brou (1520), where the powerful Margaret of Austria assembled the greatest artists of the day. There we find traditional Gothic enshrining Flemish features; white Carrara marble is wrought by Italian workmen; wood workers and painters are brought in from abroad. Only the most inveterate mediævalist could complain of this adulteration, for the world of art has been permanently and gloriously enriched.

As a reflection from this instructive book we may seek a moral for ourselves; to work out our own salvation in the spirit of our own day, adopting neither an irresponsible disregard of the past, nor a prudish avoidance of all outside materials and influence. To this end let us resolve to recognise what is significant without respect to labels. Why should it be deemed exquisitely modern to follow the unrepresentational fancies of the first millenium, but soundly traditional to respect the natural forms that later were achieved by the mediævalists and perfected by the Renaissance? Such distinctions are historically and æsthetically unsound. The traditionalists may maintain that naturalistic standards avert gross incompetence and extravagance, but they do not prevent mediocrity and decay. Our best hope lies in a generous acceptance of differing expressions, tempered by a shrewd criticism of what is really worth while.

* "Medieval Sculpture in France," by Arthur Gardner, M.A., F.S.A. Cambridge University Press. 1931. Price £3 13s. 6d. net.

# RENT RESTRICTION AND CROWN LANDS

The case we noted under this heading in our Legal Section, February 26 (Wirral Estates, Ltd., *v.* Shaw), has since been taken to the Court of Appeal, where, however, the decision of the Court below has been affirmed (*Weekly Notes*, March 19). We have so recently stated the facts that it appears unnecessary to repeat them in detail. It will be remembered that the Crown had in 1915 requisitioned the Well Hall Estates, and erected certain huts thereon, and in 1919 had let one of them to the defendant in this case. In October, 1928, the Crown had sold all the huts to the plaintiffs, the defendant being in occupation of his hut. In June, 1929, the plaintiffs (the purchasers) gave the defendant notice to quit, with an increase of rent to 10s. 6d. In the March 9 report in *The Times*, a further notice to quit, with a further increase of rent to 10s. 9d., on April 11, 1930, is mentioned, not referred to in the report in the *Weekly Notes*. This is not, however, material, as in either case the tenant continued to pay the increased rent and remained in occupation until, on April 30, 1931, a notice to quit expiring May 11 was served upon the defendant (the tenant), and the proceedings for possession were taken. The whole decision depends upon the finding of fact by the County Court judge that at one of these dates a new tenancy was created, a fact which was accepted both in the Divisional Court and in the Court of Appeal, as unquestioned, and it is material to the decisions delivered in both Courts, for if the tenancy had been a continuing tenancy the decision in Clark *v.* Downes (145 L.T. 20) would have applied, the premises been held free from restriction, and the plaintiffs entitled to possession; but both Courts have held that that decision only applies to existing tenancies from the Crown, and not to new tenancies created after the Crown had parted with possession.

There is nothing in the reports to show on what grounds the County Court judge held that the notice to quit with an increase of rent created a new tenancy, as there was no appeal upon this point, and we can only suggest that that finding was founded on the fact that on the authority of Clark *v.* Downes until the tenancy taken over from the Crown was determined by notice the premises were not controlled at all, and therefore the landlords were free to create a new tenancy after the notice to quit and of an increase in rent, quite apart from any questions under the Acts, such as their having to obtain actual possession. Thus the new tenancy when created, the plaintiffs not having obtained actual possession in the meantime, came again within the provisions of the Rent Restriction Acts, which the Courts held applied in this case, the claim for possession being dismissed with judgment for the defendant.

# MISTAKE IN CONTRACTS

By W. T. CRESWELL, Barrister-at-Law, Hon. A.R.I.B.A., A.S.I., etc.

One of the essential elements of a building contract is that there must be a genuineness of consent between the employer and the contractor. That is, that two parties to the contract must not be mistaken individually or reciprocally as to what they each and both contemplate. And the terms of the building contract must express this clearly to them both.

When it can be proved that the contract has been entered into under a genuine mistake or misunderstanding, the contract is void; that is to say, it has no legal effect and neither party can sue the other party on the contract.

But the nature of the mistake must be material to the contract; for instance, a mistake in the mind of one of the parties as to the identity of the other party, or as to the subject matter and nature of the transaction involved.

This mistake must, of course, be proved by evidence to the satisfaction of the Court.

In construing a written contract, the Court will not permit of evidence to vary or add to its terms, unless such evidence be necessary (1) to supplement the written text when it contains only part of the contract, (2) to prove the contract is subject to a conditional precedent, (3) that it is invalid, (4) to identify the parties of it or the subject matter of it, (5) to explain foreign, illegible or technical expressions, or a special usage or custom, (6) to explain a mistake where special equitable remedies are applicable, (7) to connect documents together in order to show that they form part of a contract, or (8) to prove the existence and contents of a document which has been lost, and which formed an integral part of the contract.

Many building contracts depend upon their enforcement of mere correspondence between the parties; but in construing such a contract the question so often arises whether there ever was a concluded, complete and binding contract; or whether the matter ever got beyond the stage of negotiations with a contract in view but not entered into. The whole of the correspondence and the alleged conversations between the parties must be examined. The fact that the parties have *signed* letters does not necessarily show a contract, especially if it is clear that those documents on which the claim is based do not express the good faith and real intentions of the parties.

In Hussey *v.* Horne-Payne (1879), 4 A.C. 311, it was held that though the first two letters of a correspondence seemed to constitute a complete contract, yet, upon the consideration of the whole of what had passed in letters and conversation, no conclusive and complete contract could be established.

Moreover, when it is sought to prove a contract by correspondence, subsequent negotiations thereon will invariably imply an agreement for the rescission or setting aside of the original contract; although, in general, it must be remembered that if an agreement has been already arrived at, it cannot be set aside without sufficient proof by other evidence that the consent of both parties to set it aside was expressed or implied. See Bellamy *v.* Debenham (1891), 1 Ch. 412, and Perry *v.* Suffield (1916), 115 L.T.R. 4.

Furthermore, no fresh terms can be imposed except by definite and mutual agreement of both parties. In Leslie & Co. *v.* Commissioners of Works (1914), 78 J.P. 462, a firm of contractors tendered for the execution of certain works for the Commissioners of Works. The tender was accepted and a contract was prepared, but before it was executed by the Commissioners of Works, the contractors wrote to say that they were sending the contract executed by them "on the assumption that in the event of the Bill dealing with workmen's insurance now before Parliament becoming law, the payments thereunder which will fall upon this company as employers will be recouped to the company under clause 15 of the contract." No reply was received to this letter, and the contract was executed by the Commissioners of Works. In an arbitration, the arbitrator stated a case for the opinion of the Court; to ascertain whether the terms of the letter were binding on the Commissioners. It was held that the Commissioners were not bound by the terms of the letter nor estopped from relying upon the true construction of the sealed contract.

# BOOK REVIEWS

*The Workmen's Compensation Acts, 1925 to 1930.* With Notes, Orders and Regulations. By W. Addington Willis, C.B.E., LL.B., of the Inner Temple and the North-Eastern Circuit, Barrister-at-Law. Being the Twenty-Seventh Edition of "Willis's Workmen's Compensation Acts." London: Butterworth & Co., Shaw & Sons. Price 15s. net.

The last edition of this standard work appeared on July 29, 1929, and this twenty-seventh edition brings the subject up to date, incorporating the decisions down to the end of 1930. In his preface the author draws attention to the following alterations that have been made in the law since the appearance of the last edition: the amendment of section 47 of the principal Act of 1925 by the inclusion of asbestosis as an industrial disease by the Workmen's Compensation Silicosis and Asbestosis Act, 1930, and the extension of the powers of the Secretary of State contained in section 47 to enable a general scheme to be made applicable to all industries and processes to which compensation schemes apply for the purposes of co-ordinating the medical arangements in connection with those schemes; an alteration in section 7 which relates to the insolvency of employers, certain sub-sections which relate to companies having been amended or repealed and transferred to the Companies Acts: and the introduction of interim awards where under section 12 the employers desire to terminate or diminish weekly payments since the decision of the House of Lords in Anchor Donaldson, Ltd., *v.* Crossland (1929, A.C. 298; *The Builder*, July 26, 1929), and of the Court of Appeal in Woodrow *v.* Trawlers (White Sea and Grimsby), Ltd. (1930, 1 K.B. 176; *The Builder*, September 13, 1929). The references to the cases are inserted by us .

There is, however, one other very important alteration in the law which has come too late for the author to mention in this edition which has been effected by the Workmen's Compensation Act, 1931, in order to remedy the hardship disclosed by the decision of the majority of the House of Lords in the case Bevan *v.* Nixon's Navigation Co. (1929, A.C. 44; *The Builder*, November 22, 1929).

In an article in our issue for February 13, 1931, we discussed this hardship and the Private Member's Bill introduced to amend it, and whilst we urged that the hardship should be done away with we deprecated the form of the Bill as then introduced. We there stated the hardship to be that the decision of the majority in the House of Lords amounted to this, that when a man has been injured by accident so that he cannot follow his old occupation but is certified as fit for other work, then the compensation must be reduced to half the difference between what he was earning in his old employment and what he could earn in the work he is certified fit for, although he proves that no such work can be obtained by him. The decision resulted from the construction the majority of the House of Lords felt compelled to place upon section 9, sub-section (4) of the Act, that all that could be regarded was the man's physical condition as interpreted in the case Cardiff Corporation *v.* Hall. In the new Act it is provided that when a man has been certified to be fit for work of a certain kind and has failed to obtain the same, and it appears to the County Court Judge that, having regard to all the circumstances, it is probable that the workman would, but for the continuing effects of the injury, be able to obtain work in the same grade in the same class of employment as before the accident, or that his failure to obtain employment is a consequence wholly or mainly of the injury, then the Judge shall order that the workman's incapacity shall be treated as total incapacity resulting from the injury for such period and subject to such conditions as he may order. The Act appears free from the objections we urged against the Bill before us in February, 1931, and it is made retrospective to cases where the accident happened on or after January 1, 1924; and in applications for reviews of weekly payments the effect of this Act is to be regarded, although otherwise there has been no change in the condition of the workman or any change of circumstances other than the passing of this Act. The effect of this Act is easily noted in the volume under consideration as qualifying the statement at page 217 that the House of Lords in Bevan's case recognised the principles laid don in Cardiff Corporation *v.* Hall (1911, 1 K.B. 1009; *The Builder*, June 2, 1911) as applying to section 9, sub-section (4).

Then in connection with the author's careful notes on "Proof of accident arising out of, etc.," the case of Fisher (now Johnston) *v.* London, Midland and Scottish Railway, which we noted in our issue June 26, 1931, must now be borne in mind, as the House of Lords deprecated the distinction that had been drawn in some decisions between cases where the man was actively performing his duties, from those where the man was merely on the premises in the course of his service, and the House of Lords indicated that the cases Lendrum *v.* Ayr Steam Co. (1915, A.C. 217) and MacKinnon *v.* Miller (1909, S.C. 373) were to be preferred to Marshall *v.* Owners of the Wild Rose (1910, A.C. 486; *The Builder*, August 13, 1910).

In Fisher *v.* London, Midland and Scottish Railway, the House of Lords pointed out that decided cases are only useful so far as they lay down principles, and the author in this section of his work and in some other sections has performed a useful service in grouping the cases so as to illustrate certain propositions; and with the continued growth in the number of cases, turning, as they do, on questions of fact, he may possibly find it possible to extend the above system and eliminate some of the cases and define principles from others. This work, which has almost a unique record in the number and frequency of its editions, retains all its well-known features and requires no recommendation at the hands of the reviewer.

*Architectural Shades and Shadows.* By Edgar Greer Shelton. London: The Library Press, Ltd., 36, Russell-square. Price 18s. net.

This is an American volume, divided into two parts. Each chapter in Part I explains processes necessary for solving certain problems, such as finding the shades cast by the Orders. In Part II, a section, corresponding to each chapter, sets problems to be worked out by the methods explained in Part I. It is assumed that the student is familiar with orthographic projection and possesses an elementary knowledge of descriptive geometry. Part I is illustrated with some fine examples of wash drawings, and includes some students' work from the University of Illinois. The necessity for a knowledge of correct shadow hardly needs to be stressed. Too much of our modern architecture bears the clear imprint that, in its inception, it was two-dimensional, the result of elevational drawings on paper. A knowledge—and continual application—of shadows would do a great deal to counteract this: hence the justification of this book. It is fully illustrated with diagrams and some photographs, and the letterpress is clear and condensed to cover as much ground as possible.

# SOCIETIES AND INSTITUTIONS

## NOTTINGHAM, DERBY AND LINCOLN ARCHITECTURAL SOCIETY.

THE annual dinner of the Nottingham, Derby and Lincoln Architectural Society was held at the Black Boy Hotel, Nottingham, on March 23. The President, Mr. T. Cecil Howitt, D.S.O., F.R.I.B.A., was in the chair, supported by a distinguished company of guests and members, which included Dr. Raymond Unwin, P.R.I.B.A., the Lord Mayor of Nottingham, and Mr. J. B. Surman (President, Birmingham A.A.).

The toast of the "Municipalities of Nottingham, Derby and Lincoln" was proposed by Mr. Howitt, who said that to obtain better architecture there were two main qualities that architects must have, namely, efficiency and enthusiasm. Owing to the extreme competition in all professions and businesses, there was no room in the country at the present time for anyone who was not really efficient in his own particular work, and since the days of the first Charter of the Royal Institute in 1837, the Royal Institute of British Architects had always been particularly keen on the proper education of all young men entering the profession, and, year by year, the standard of efficiency was gradually getting higher and more difficult to attain. In a determined effort to try and improve the standard of civil architecture, the Nottingham Society had now followed the wise lead of the Royal Institute by arranging for an Architectural Medal to be awarded once every three years for the most atttractively designed building erected in any public street or square within the area of the province. The first award would be made at the end of the three years terminating December, 1933. From the number of designs that would be entered, it was hoped to stimulate the interest of the public in the design of new buildings. In the Society's district there was a serious demand for carefully-thought-out and well-planned designs for small houses—something slightly larger than the recognised standard of the modern council house. The Society was therefore arranging a panel of some 8 to 10 of its members to prepare designs for that type of house, and in the course of six to eight weeks' time, it was hoped to have an exhibition of these so that people who were interested in the possibility of erecting small houses might examine these, and if they appealed to their tastes, might purchase copies of the designs at a nominal fee of £5 to £6 per house, and thus ensure getting a proper standard of design before the work was commenced, and not a house that was designed as each successive layer of bricks was laid. He did not propose to refer to the tremendous amount of unemployment in the building industry at the present time, and the reckless and ill-considered curtailment of building work that had put some quarter of a million operatives out of employment, but he would like to congratulate the Nottingham City Council on the very reasonable and logical view they had taken with regard to the future building programme in the district.

Referring to the planning of large towns, the speaker said that cities of the size of Birmingham and Manchester had adopted with great success a small advisory board to offer to the Council suggestions for their consideration on the development of any particularly important feature or street in the city. That question of suggested development should not be confused in any way with elaborate hard-and-fast designs for any purpose. The development of Carrington-street many years ago afforded a golden opportunity for some simple general treatment for the whole of one side of the main street. It might be regretted that advantage was not taken of that splendid opportunity, but it was more regrettable still to see the tragedy of haphazard development in the present-day Friar-lane and the new portion of Parliament-street. It was only really necessary to settle four very simple points, namely, the material to be used, the correct height for the buildings, the height of the roof, and the height of the shop fronts. There were several new stone buildings around the Market Square, and it was hoped that further commercial premises would be erected before long.

Dr. Unwin, who replied to the toast of "The Royal Institute of British Architects and the Allied Societies," declared that we had reached a condition of absurdity in regard to unemployment. An enormous amount of work remained to be done in slum clearance and replanning, yet we maintained in idleness to-day nearly 300,000 building operatives. We were maintaining in idleness six million workers and other dependents. That was not a rational thing and we as an intelligent people had got to find the way out. We were spending enormous sums in creating new arterial roads, and just as rapidly blocking these roads with buildings up to the frontage and side streets. Soon we should have to create new roads to by-pass the by-pass roads, simply because we had not set out logically to think out and to plan. Dr. Unwin said that he was intensely surprised at the amount of opposition in certain Parliamentary committees to the extension of certain town planning powers so that local authorities might exert some co-ordinating influence not only on the land likely to be built on, but on the rebuilding of built-up areas and the salvation of downs and rural areas which were so rapidly being destroyed.

Mr. John B. Surman also acknowledged the toast.

## INSTITUTION OF CIVIL ENGINEERS.

AT the monthly informal meeting held at the Institution of Civil Engineers on March 16, at which Mr. S. B. Donkin (member of Council) took the chair, a discussion on the means to be adopted for reducing the quantity of heat rejected to the circulating water was opened by Mr. I. V. Robinson, A.M. Inst.C.E. After pointing out that although this was apparently a condenser question it really was more a question of the heat cycle to be used in the prime mover, reference was made to the maximum efficiency possible with a Carnot cycle and to the efforts that had been made in the past to increase the upper temperature $T_1$ and to decrease the lower temperature $T_2$. $T_1$ had been raised as high as the present materials would allow, but the use of steam at these higher temperatures involved exceptionally high pressures.

Mr. Gaze referred to this matter in the discussion. Attention, he said, was being given to binary circuits in which some fluid other than water was used for the higher temperatures, the fluid being selected so that its vapour pressure at the maximum possible temperatures was not excessive. Mercury had been used for this purpose, and lately a suggestion had been made that ammonia would be very suitable.

Mr. Verity stated that with ammonia it was said that the pressure at a temperature of 400 deg. C. was only slightly above the atmosphere. A compound of zinc and ammonia was used with zinc as an absorbent for the ammonia after expansion in an ammonia turbine, the ammonia being regenerated from the compound under pressure in an evaporator.

Mr. Martin referred to the improvements in the present steam cycle by the use of regenerative feed-water heating and reheating the steam after partial expansion. He also suggested that regenerative feed-water heating was likely to be more efficient than the use of a reverse heat pump, about which some information was given by Mr. Moore. A brief description was also given of the principles underlying a new cycle, of which the chief feature was a supercharged boiler from which the products of combustion were led under pressure to an exhaust gas turbine.

The introducer referred to the possibility of using exhaust steam at a suitable pressure for heating buildings in the neighbourhood of the power-station, instancing numerous examples in the United States where special stations had been put up for heating, and in Czechoslovakia, where a combined power and heat station had been installed to supply both these commodities to mills in Brunn.

During the discussion, reference was made to the increased condensate temperature now possible with the latest type of condensers, thus diverting from circulating water a certain amount of heat. Interesting information was given by Mr. Verity regarding the actual inspection of the experimental apparatus dealing with the zinc ammoniacate process. The use in America of diphenyl-oxide as a heat conveyor was also referred to. Mention was made of the use of exhaust steam for heating greenhouses in the neighbourhood of the Klingenberg station, and to the possible high efficiency with a Diesel installation used for combined heating and lighting of buildings or works. It was emphasised that reheating processes must be as simple as possible, the earliest examples having the complications of large pipes and valves, and, therefore, excessive capital cost.

## INSTITUTION OF STRUCTURAL ENGINEERS.

A PAPER on "Modern Constructional Practice in Sewerage and Sewage Disposal" was read by Mr. A. H. S. Waters, M.Inst.C.E., M.I.Struct.E., before the Institution of Structural Engineers on March 31. Modern practice, said the lecturer, in respect of the design of sewers and the materials used in their construction, whilst showing modifications and developments, had not essentially changed during recent years. In the smaller sizes, salt-glazed ware pipes jointed in yarn and cement mortar (or, in water-logged ground, in yarn and cement grout or bitumen); and in the larger sizes, cement concrete faced with brickwork, concrete alone either with or without pre-cast invert blocks, or brickwork alone in certain cases, were still in general use; as also were the cast-iron pipes in all sizes under certain conditions. The introduction of pipes manufactured from fine cement concrete dated from 1875, but their use in sewerage construction had become very general in recent years, particularly in the intermediate sizes and in the larger sizes with a concrete foundation and haunching, or an entire concrete surround. An increasing percentage of the concrete pipes used in works of sewerage were now manufactured by "spinning" the requisite amount of freshly mixed concrete in moulds, which were rapidly rotated about the axis of the pipe. The concrete in such pipes or tubes was extremely dense and correspondingly water-resisting, the spinning also resulting in a good smooth inner surface. Cast-iron pipes had long been utilised for pumping mains and for gravitational sewers where strength greater than that afforded by stoneware or concrete pipes or brick barrel construction was required, or where speed in laying was desirable. For use in sewers which might be subject to angular deviation on account of mining subsidence or other causes, various joints permitting a certain amount of flexibility had been devised. Where considerable variations occurred, however, many engineers strongly inclined to the use of steel pipes provided with long sleeve joints run with bitumen or other material. Occasionally in sewers of very considerable diameters, the construction was carried out in cast-iron segments. Manholes on sewerage systems were still for the most part constructed in brickwork on concrete foundations. An increasing number were being formed of pre-cast concrete segments, the joints between the segments being made in the normal way with cement mortar. The use of reinforced concrete had not been so generally adopted in the construction of large sewers in this country as might reasonably have been expected, partly owing to the fact that the Ministry of Health would not grant the maximum period of loan for that type of construction. However, in recent years, a considerable number of sewers and culverts had been constructed in reinforced concrete.

# INDUSTRIAL STATISTICS 1931

For many years in the early part of a new year we have given a survey of the industrial conditions prevailing in the past year, and 1931 is a marked year in that nearly two-thirds through it the nation received a severe shock when, as a result of the investigations by the Committee on National Expenditure, it was announced that the nation stood on the edge of a financial crisis, which, despite immediate stringent measures being taken, caused the gold standard to be abandoned.

In our review of the year 1929, which presented some favourable conditions, we asked the question "Are we paying our way?" and in our review for 1930 we expressed the opinion that there was little doubt that that question must be answered in the negative, and called attention to a public appeal signed by Lord Grey, Mr. McKenna and other influential signatories for economy. In that appeal three propositions were laid down (amongst others) which accorded with the views we had already expressed in these columns, viz.: (1) That the weight of existing taxation is a prime cause of the present stagnation in trade; (2) that the road of public waste is the road of want and privation for the great mass of the people; and (3) that it is only by living strictly within our means that we can expect to ensure a progressive level of comfort and well being. A world cause of depression has since supervened, viz., the scarcity of gold owing to hoarding by the United States and France, contributed to by the payment of reparations, which is preventing the free international exchange of commodities and seriously affecting the use of gold as a medium of exchange. But this new cause has not lessened the importance of the above three propositions; on the contrary it has enhanced it, as the necessity for economy is only the greater when the nation is off the gold standard; otherwise the dangers of inflation are immediate.

By the prompt action taken by the National Government internal stability has been as far as is possible assured by the steps taken to balance the Budgets of this April and the April following. We are, however, all apt to regard only the annual expenditure we are committed to, and to lose sight of those commitments of the past which still hang over our heads, but of late years the nation has been living on credit to a surprising extent, and it is well to regard the figures relating to those liabilities. The National Debt, it was recently stated, now amounts in round figures to £7,500,000,000, but that is not all, for the outstanding Local Debt at the end of March, 1929, was £1,174,398,992, and, in addition, nearly two million pounds remained to be repaid in respect of money lent by one capital account to another capital account of the same authority. The annual national expenditure is about £804,000,000, and in the year 1928-29 the amount raised from the rates was £166,466,401.

The Majority of the Committee on National Expenditure reported: "We fear that the country must face the disagreeable fact that its public expenditure—and in this we include local as well as national expenditure—is too high, and that it must be brought down to a lower level." The Committee also drew attention to the burden placed on the future by housing subsidies, and (as regarded pensions to servants of the State and local authorities and Old Age Pensions and Widows' Pensions) pointed out that we were enjoying benefits for which we were not providing the cost, and to the extent of about £20,000,000 were leaving that to posterity.

We venture to think that the lesson to be learnt from such figures as the above, which are typical, is that until trade further improves by an increase of exports and a diminution in imports, the loan policy must be, as it has been, strictly scrutinised and limited.

When large roadmaking and other similar operations can only be carried out by means of loans, the loans should be rendered terminable at certain periods, either as part of the capital expenditure, or by means of sinking funds obtained from returns from the enterprise, and thus not be a charge handed on indefinitely to posterity. This is especially the case when, in times of depression or industrial difficulty, the nation as a whole is not paying its way, but is obliged to resort to taxation on an undue scale to meet its annual liabilities. When we regard the above figures, showing both the national and local indebtedness, we cannot but think that the above principles have been neglected and no proper provision has been made for the redemption of loans and, in the case of local loans, we believe it has sometimes been asserted that sinking funds are kept in circulation unduly, and not definitely applied to the reduction of each loan. The lending of capital from one capital account to another, mentioned above, may lead to some confusion in this matter.

In times of prosperity loans and overdrafts can be repaid in reasonable periods, but, unfortunately, these are most required in times of depression, and then the prospects of redemption may be remote and burdens are accumulated which posterity is called upon to meet, and in times of real crisis, such as the present, the result is very serious. We pride ourselves on having established a higher standard of health and living, but an examination of the national and local indebtedness may raise the doubt whether this has really been "established," or whether it is merely floating on credit.

**Employment and Unemployment.**

With these preliminary general observations we turn to the statistics as published in the Labour Gazette.

The estimated number of insured workpeople *in employment* in January, 1931, was 9,215,000, and after fluctuations it stood in September at 9,326,000, but by December it had risen to 9,593,000, as compared with 9,475,000 in the previous December. The average figure for the whole year was 9,409,000 as compared with 9,785,000 in 1930, and this average of 9,409,000 was the lowest since the year 1923, with the exception of the year 1926, the year of the coal stoppage and general strike. The average rate of unemployment among insured persons was 21.3 per cent., as compared with 16.1 per cent in 1930. Of these persons, 16.7 per cent. were wholly unemployed, and 4.6 per cent. temporarily stopped, these figures comparing respectively with 11.8 and 4.3.

An idea of the numbers of persons involved is best obtained by taking the date, December 21, 1921, as here in the *Gazette* the numbers are given as well as the percentage. On that date the percentage rate of unemployment was 20.9 as compared with 20.2 on December 22, 1930, and the numbers of persons (insured and uninsured) on the register on December 21, 1931, were 2,573,552 (2,165,210 wholly unemployed and 408,342 temporarily stopped) as compared with 2,896,989 in 1930 (2,257,880 wholly unemployed and 648,755 temporarily stopped). Thus in December, 1931, the number of wholly unemployed was 319,000 greater than a year before, but the number temporarily stopped was 240,000 less; but if a comparison is made between September 28 and December 21 in 1931, the number of wholly unemployed had decreased by 93,000 and the number temporarily stopped by 231,000. The percentage rates at these latter dates being respectively 22.6 and 20.9. It is important to note that it is stated in the *Labour Gazette* that the legislative changes effected by the Unemployment Insurance (No. 3) Act, passed July 31, and the National Economy Act, passed September 30, have diminished the numbers of persons registered at the Exchanges by about 90,000 (mostly married women), but that these changes had not affected by the end of December the numbers of insured persons recorded as unemployed, nor the percentage rates of unemployment. Thus the fall in the percentage rates from 22.6 in September to 20.9 in December represents the measure of a real improvement in employment. The actual figures appear to be a total decrease between October 19 and December 21 of 227,957, of which 90,000 were due to disallowance of claims, but 138,000 due to improvement in employment.

Although lack of space prevents us from dealing with them, we cannot pass from the subject of unemployment without referring to the inquiries carried out by the Ministry of Labour, at the request of the Commission on Unemployment Insurance, dealing respectively with persons insured against unemployment in Great Britain in July, 1930, and with those on the live registers of the Exchanges on February 2, 1931. The inquiries were carried out by the sample method. The Report is voluminous, and is published in the *Labour Gazette* for January, and we can only refer to one statement it contains: "More or less continuous unemployment is confined to a very small section of the insured population" (the number of insured workers at the relevant date was estimated as 12,000,000), "which cannot include more than about 100,000 men and 3,000 women. This group represents the maximum size of the 'standing army' of the unemployed. The number of those who have had no unemployment is at least thirty times as large." This closely resembles the figures we gave in an article, May 10, 1929, founded on a statement of Mr. Baldwin and the Report of the Balfour Committee.

**Rates of Wages and Hours of Labour.**

The net result of all the changes in rates of wages during the year was a decrease of £399,500 in the weekly full time rates of wages. It has to be remembered that these figures take no account of agricultural labourers, Government employees, domestic servants, shop assistants, and clerks, but in a note in the *Gazette* it is stated that it is estimated that the average decrease for all industries combined for which statistics are available, but including agriculture, was equivalent to over 2 per cent. of the wage rates in operation at the beginning of the year. The wage earners are not the only people upon whom the hard times have operated, for the wholesale cuts in official salaries have amounted to 10 per cent. Of the above decreases in wages £91,600 fell under the cost of living scales, and over £17,600 took effect under sliding scales based on selling prices. The decrease in the rates of wages affected some three million workpeople, the principal decreases taking place in the building, public works, and contracting group of industries, and in the textile industry. It has to be noted that, despite the depression existing in 1930, the average decrease in rates of wages was comparatively small, £56,600, which appears to indicate that there was no hurry to press unduly on the wage earners, and that reductions were deferred until the national position made them actually essential.

In 1930 the hours of labour showed a net decrease of 873,500 in weekly hours, but in 1931 the net result has been an increase of 151,000 hours, the changes in 1931 mainly affecting coal miners. Some 293,000 workpeople had an increase of slightly over an hour a week, whilst 108,000 workpeople had an average reduction of about one and a-half hours a week.

**Trade Disputes.**

There were 419 trade disputes in 1931, compared with 422 in 1930, involving directly and indirectly 490,000 persons, as compared with 307,000 in 1930, and a loss of working days of 6,980,000 compared with 4,400,000 in 1930, the most serious disputes being confined to

the cotton manufacturing industry in Lancashire and the coal mining industry in Wales.

**Cost of Living.**

Relative to wages must be the cost of living, and the figures relating to the cost of living we consider very remarkable in a year when the nation was forced off the gold standard and the dangers of inflation had to be faced. Had that occurred we should have found a spurious rise in the rate of wages, and the cost of living might have gone up to almost any extent, whereas we find genuine wages being paid at a slightly lower rate, and the cost of living lower at the end of the year 1931 than it was at the commencement. At the beginning of the year the increased percentage (including all the items usually embraced in the returns of the *Gazette*) over the level of July, 1914, was 53, but in December it was 48, and by January 1 of this year was 47. But the level in respect of particular items is particularly instructive. On January 1, 1930, the food level was 38; it fell in June as low as 27, but in July was 30, and on January 1 this year was 31. Rents continued stationary the whole year at 54, but clothing, which commenced the year at 105, fell by October to 90, and remained at that figure on January 1 this year. Fuel has remained fairly constant at 75, and the miscellaneous items also remained constant at 75 throughout the year—a very good record for such a year as was the past. The times are hard, but they would have been catastrophic but for the prompt measures taken to balance the Budget, and when the statistics of the year relating to our internal industrial conditions are regarded we think the nation has some cause to congratulate itself that the sacrifices they have been called upon to make have not been made in vain. The external conditions, by which we mean the export trade, depend in greater degree upon international co-operation, but, with a whole world in greater or less difficulties, it is to be hoped that the same spirit of sacrifice may be forthcoming in the settlement of international questions, such as reparations and co-operation in arriving at a satisfactory medium of exchange.

# FUTURE OF DOMESTIC DECORATION

In a lecture on this subject to the Institute of British Decorators at the London School of Hygiene and Tropical Medicine on January 7, Mr. C. Overy Masters, F.I.B.D., said that when for interior decoration the tints or colours to be applied as paint or paper by the decorator were (as they usually had to be) related to the contents of the room, floor-coverings, curtains and furniture, the work of the decorator was realised to be of considerable importance involving artistic skill of no mean order. It might be useful to contrast the specific province of the decorator with that of the artist in the very varied activities in which they were engaged in the accomplishment of domestic decoration. The decorator's work was related to the necessities of cleanliness, protective purposes and labour-saving ends, and from those mundane associations his influence might extend until the result of his work might be a work of art. The artist, although he might be also the decorator, was given opportunity when bare necessity was satisfied, and there was surplus wealth to encourage his efforts. If we recalled the great buildings of past ages which exemplified the highest achievements of decorative art we would find that they owed their place in public esteem most frequently to the work of the artist or the sculptor rather than to the architect, whose plan gave both artist and sculptor their opportunity, or to the decorator, without whose co-operation their work would be isolated and lacking sympathetic surroundings and adequate support.

The lack of clarity in thought regarding the province of the decorator and that of the artist-specialist, and the possibilities of their co-ordinated efforts, explained such pessimistic statements as had been seen recently and forcibly put by a writer in the following way: "Recent illustrations and photographs that I have seen of new German works all tend to emphasise the bitter truth that the painter and decorator is rapidly lessening in importance. I verily believe that this craft of decoration which reaches back through centuries of noble accomplishment, that has a host of the world's proudest names emblazoned on its rolls and that has given mankind a heritage of beauty, culture, comfort and delight, is in danger of extinction in the not too remote future." Such was the summing up of a statement of facts regarding the number of materials which were now being exploited and used for interior decorative work, such as glass, metal, chromium plating, veneer, marble and other materials made of what only the inventor knew, also of the effects obtained by modern lighting which, it was alleged, not only lessened the importance of the decorator, but also actually decreased the volume of his work.

The arrival of those materials and methods which had hitherto mainly been used in public buildings had admittedly given us furiously to think, but surely also to thank for the increased interest in decoration which was now in evidence owing to their novelty. Was it not the fact that the differences which were characteristic features of past periods of decorative work were frequently those which were caused by just such introduction of new material, assimilated with results that exhibited the genius of architect and decorator alike? Tudor oak panelling with beam or plaster ceiling gave way to walnut walls and painted ceilings. Then pine-panelled rooms followed, requiring to be painted, and elaborate carving to be coloured and gilded. Then imported Chinese wall-papers became serious competitors for favour, and similar papers were soon made in England. Italian brocade and French silk followed, used alike for walls and upholstery, and similar effects were produced by decorators in flock wallpapers, and so successfully that a considerable export trade was in progress about 1735. With the gradual spread of wealth and the desire for comfort, the interior decoration of the lesser houses of the people must have been a matter of concern to their owners and profitable business for the decorator until we found that decorating firms engaged the labours of highly skilled artists, designers and craftsmen in the many branches of industry connected with domestic decoration. That hasty survey showed that in the midst of continual changes, marked ability was shown in taking advantage of new conditions as they successively arose, although the importation of new materials might not have been in such bewildering variety in a given time as there had been in recent years. Many of those were the result of scientific research, but their continued use in decorative work would depend for even commercial success upon the artistic spirit using them as a means of expression. We knew that there would always be a demand for a new material for the sake of its novelty, and that the sense of novelty decreased in proportion to increased use. Necessity gave materials utilitarian value. Novelty was meteoric. Material used in the effort to express the ideal had claim to permanence; art, not matter, endured.

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**Water Engineers' Directory.**

Now issued is the Water Engineers' Handbook for 1932, thoroughly revised and extended considerably. It is claimed that the Directory of Water Undertakings section is the most complete and authentic that has ever been compiled. Several of the new features should command the attention, not only of water engineers but all concerned with public works; and in particular we would draw notice to Mr. Witton Booth's treatise on Rating and Valuation. The published price is 8s. 6d., post free 9s., and the book is issued by the Colliery Guardian Co., Ltd., 30-1, Furnival-street, E.C.4.

# INDUSTRIAL RIVALRY AND MONOPOLIES

There are signs that the public may be deprived of some of the advantages connected with modern improvements by the rivalry or jealousy displayed by certain undertakers, and this is especially serious where the undertakers of industrial enterprise are the local authorities working with the rates or loans as capital, and often to some extent subsidised. The most recent example of this is connected with a Bill recently promoted in Parliament. From the report in *The Times*, March 15, it appears that the Kettering Urban District Council were imposing or seeking to impose conditions that only electricity, of which they were the undertakers, should be used in the streets and houses in their area which had been constructed out of public funds, and to counter this the gas company had introduced a Bill, the object of which was to leave the matter to the choice of the tenants. It is to be observed that in some districts the contention might have been that only gas should be used, for in some districts the local authorities are the gas authority and the electricity is supplied by a company. But in the interests of the public the ideal system would appear to be that the consumer should be left free to use either gas or electricity, or both. In another direction we have now contentions between the railway companies and the motor interests as to the traffic to be carried on the roads, and various interests of members of the public may be jeopardised by this kind of rivalry, and a difficult position has arisen which will require very skilful handling.

We can illustrate this by an example afforded so long ago as 1906. The Mersey Railway, desiring to bring passengers to their stations on the Birkenhead side of the river Mersey, instituted an omnibus service, but the Birkenhead Corporation who owned the ferry with which the tunnel under the river competed, and who worked in connection with the ferry a tramway system, opposed this, and the omnibuses were held by the House of Lords (1907, A.C. 415) to be outside the powers granted to a railway company, and an injunction was granted. This affords an example of the rivalry of two forms of undertaking which have since become almost obsolete—the ferry versus the railway tunnel, and the horse omnibus versus the tramway—carried on at the expense of public convenience, but the matter does not stop there, for there can be little doubt that this decision deterred the railways from taking steps to counteract that road traffic, and to take a part in it, which has since proved so disastrous to their business, powers being withheld from them until the opportunity for counter action was lost.

In the Bill we have referred to above, the inclination of Parliament appears to have been to allow the question to be settled in committee, but it appears to us that such questions as the above, which are of the greatest importance to the public at large, should not be left to be determined in different areas according to resolutions passed by the local authorities and countered by private Bills, but that these attempts at monopoly should be rendered universally impossible throughout the country by a public Act of Parliament containing a general section prohibiting such monopolies, and there is precedent for this in such Acts as the Land Clauses Act and other Acts which prescribe the general powers of undertakers. The matter is urgent and should certainly not be permitted to stand over whilst monopolies which hinder real progress are being acquired.

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**Catalogues, etc., Wanted.**

Messrs. H. M. Nowell, Ltd., contractors, late of Stockton-on-Tees, and now of Market-chambers, Church-street, Enfield Town, would appreciate the receipt of up-to-date catalogues and price-lists, etc.

# ARCHITECTS' & BUILDERS' INQUIRY BUREAU

## QUESTIONS.

### Specification for Roman Tiled Roof.

SIR,—I should be glad if any of your readers could let me have a brief specification for covering a roof with best quality red double Roman tiles.

READER.

### Cast Stone.

SIR,—Is it possible satisfactorily to carve cast stone, or should modelling be carved in reverse and the result cast thus? Alternatively, is it desirable to arrange the carved portions in natural stone to match?

ORNAMENT.

### Cleaning Stone.

SIR,—The completion of new stone-faced premises raises the point how best to maintain it in a clean condition without resort to the steam scrubber, or any scraping that may damage the weathered face. I should be grateful for advice. OWNER.

### Weight of Floors.

SIR,—Would you be good enough to inform me what weights should be allowed as the dead weights of the following floors :—

(1) Light timber flooring and joists.
(2) Heavy timber flooring and joists.
(3) Solid concrete floor per inch thick?

CALCULATIONS.

### Galvanised Iron Screwed Water Piping.

SIR,—Can you tell me if there is any distinguishing mark denoting British manufacture in use for galvanised iron screwed water piping? We are mainly concerned with the smaller sizes—½ in., 1 in., 1½ in. and 2 in. diameter. H. H.

[Will correspondents please address replies to the Editor?]

### Marseilles Roofing Tiles.

SIR,—I should be glad if you could give me the names of any firms who manufacture, for export, roofing tiles of the Marseilles pattern.

H. H.

[Will correspondents please address replies to the Editor?]

### Iron and Steel "Marks."

SIR,—I should be glad if you could tell me if any standardised "mark" has been adopted to enable steel and iron of British manufacture to be recognised at sight. The materials which I have chiefly in mind are :—

Steel rods and bars for reinforcement.
Angle and bar iron of small sections.
R.S.J.s of small sections.

The materials would in normal circumstances be ordered from general agents in the United Kingdom by merchants in Egypt for sale to building contractors. Would any such mark apply to materials sold in Egypt under the style "British from Foreign billets"?

H. H.

[Will correspondents please address replies to the Editor?]

## ANSWERS.

### Fireproofing Woodwork.

[ANSWER TO "CHARTERED," MARCH 11.]

SIR,—I use the following : Chlorhydrate of ammonia, 15 kgm.; boracic acid, 5 kgm.; softened glue, 5 kgm.; gelatine, 1½ kgm.; water, 100 kgm. This mixture is kept at 60 or 80 C. until it is of the consistency of oil. Then it is spread over the wood similarly to varnish. Allow the first coat to dry : then apply the second. STRAND.

### Cement or Lime Mortar.

[ANSWER TO "A.R.I.B.A.," MARCH 25.]

SIR,—This is a very moot point, in which theory and experience do not always agree. It can be taken as an axiom that mortar does not alone determine the porosity of a wall, and also that cement mortar is certainly not more porous than lime mortar, being actually the reverse. It is claimed that with a porous brick cement mortar is liable to hold the free soakage of dampness in the wall bed by bed, and that the results in frost are more severe than in the case of lime mortar. With a reasonably compact and well-burnt brick I do not think this is a serious matter, and I have built in cement mortar on very exposed sea frontages with complete satisfaction, and could in such circumstances always choose cement mortar wherever possible, or, at any rate, gauge lime mortar very heavily with cement. PRACTICE.

### Soundproofing Floor.

[ANSWER TO C. AND CO., MARCH 25.]

SIR,—Your correspondent is not very clear as to what he is prepared to allow, and what not. If the top and bottom surfaces are to remain unchanged and undisturbed he can do nothing in the way of soundproofing other than the laying of a thick pile carpet or real cork linoleum. If he is prepared to lower the ceiling, a layer of sound-resisting quilt nailed to the underside of joists with battens nailed under same, lath and plastered in acoustic plaster, should solve the problem; but this can hardly be described as not removing the ceiling. SOUND.

### Errors in Pricing Quantities.

[ANSWER TO "PERPLEXED," MARCH 25.]

SIR,—In the case of errors in casting or extension, the schedule must be adjusted to agree with the total, whether in error or otherwise. Equally, errors in measurement or quantity must stand as part of the contract, the extra quantities being due to the contractor, at schedule rates. Any other arrangement would admit all sorts of abuses in tendering. Mistakes have to be paid for by those who make them. JUSTICE.

### Builders' Accounts.

[ANSWER TO F. H., MARCH 25.]

SIR,—May I venture to suggest that this query, or series of queries, is unsuitable for the medium of the Inquiry Bureau, and that any replies are bound to be somewhat profitless. Your correspondent obviously needs the advice of a solicitor and an accountant if he is personally interested in this matter, and adequate answers to his questions can only be made with a full knowledge of the facts and figures. CORRESPONDENT.

### Half-Timbering.

[ANSWER TO "FACING," MARCH 25.]

SIR,—For genuine half-timbering English oak is supreme in appearance and service. Generally, old oak members can be obtained at a cost not much different from that of new pine. The latter has been used as a substitute for a thin timbered facing, and does not compare unfavourably with the cost of new oak boards for that purpose. The writer knows where such a job has stood structurally perfect for twenty-five years or so.

HEARTS OF OAK.

### Lead Work.

[ANSWER TO "STUDENT," MARCH 25.]

SIR,—Lead for flats and large gutters should be 7 lb. to 8 lb., for small gutters 6 lb., for flashings 5 lb., for soakers 4 lb. PLUM.

### Water in Storage.

[ANSWER TO "ESTATES," MARCH 25.]

SIR,—The addition of one part copper sulphate in 10,000,000 of water stored has been found to check the development of algae growths, but the treatment needs careful and expert supervision. River water stored in bulk in open tanks promotes a process of natural purification after about one month of storage. AQUA.

### Domestic Hot Water System.

[ANSWER TO "COUNTRY," MARCH 25.]

SIR,—Boilers can be treated with a process called "bower barfing," which renders them proof against interior rust. Where water is soft this should always be specified.

PRACTICE.

# THE WEEK IN PARLIAMENT

### Town and Country Planning Bill.

LORD HARTINGTON moved an amendment to exclude from the control of the planning authorities existing dwelling-houses which are let in separate tenements. He argued that it was unnecessary to give town-planning authorities restrictive power over houses where, owing to prevalent economic causes, sub-division had become inevitable.

SIR E. HILTON YOUNG said that so far as any trade or business was injuriously affected by town planning there was a right to full compensation with which the Minister could not interfere. On the question of houses divided into single tenements, he had come to the conclusion that the powers in the Bill were necessary. There would be no motive or incentive for the authorities to abuse those powers.

The amendment was withdrawn.

SIR E. HILTON YOUNG moved, and the Committee agreed to, an amendment giving the right of appeal against the decision of the planning authority where a scheme contained a provision for regulating the design or elevation of buildings or the materials to be used in their construction. The appeal may be made either to a court of summary jurisdiction or to a specially constituted tribunal and one of the grounds of appeal may be that compliance with the decision would involve an increase in the cost of building which would be unreasonable in view of the character of the locality and of the neighbouring buildings.

Mr. HOROBIN moved an amendment to qualify the exemption given to agricultural buildings by a provision enabling the responsible authority to prevent the erection of buildings likely to injure the amenities of a locality.

Mr. HOPKINSON said that farmers were often the worst offenders in the disfigurement of the countryside by the buildings they erected.

SIR E. HILTON YOUNG agreed that much of the loss of amenity in rural districts was due to the ugliness of some agricultural buildings. A corrugated iron roof replacing a thatched roof was one of the greatest uglifications that could be found in the countryside. But it was a question of degree, and the disfigurements caused by agricultural buildings were comparatively few and far between.

The amendment was withdrawn and the committee adjourned until Thursday, April 7.

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### List of Surveyors.

The List of Members of the Chartered Surveyors' Institution has now been issued from 12, Great George-street, S.W.1, price 2s. It contains, besides the List, full details of Institution matters, councils, county branches, etc.

### Anglo-American Year Book.

The 1932 Anglo-American Year Book is the 20th edition published by the American Chamber of Commerce and contains, as usual, a very considerable amount of useful and interesting information. On the business side, the Commercial Directory of 8,500 names and addresses of principal firms, together with their agents, representatives or affiliated houses in Great Britain and the United States, is of great value as a reference list to firms engaged in Anglo-American trade. The Residential Directory and the Anglo-American "Who's Who" cover the social side, and the Anglo-American institutions and clubs are listed and a short résumé of their activities in 1931 is given. A series of special articles dealing with opening up businesses in Britain, taxes, etc., is included. The price of this Year Book has been reduced from 15s. to 10s., and may be obtained direct from the Chamber, Aldwych House, W.C.2, or from any bookseller.

# LAW REPORT

BIRMINGHAM ASSIZES.

Before Mr. JUSTICE FINLAY.

## SOIL POLLUTION BY SEWAGE.

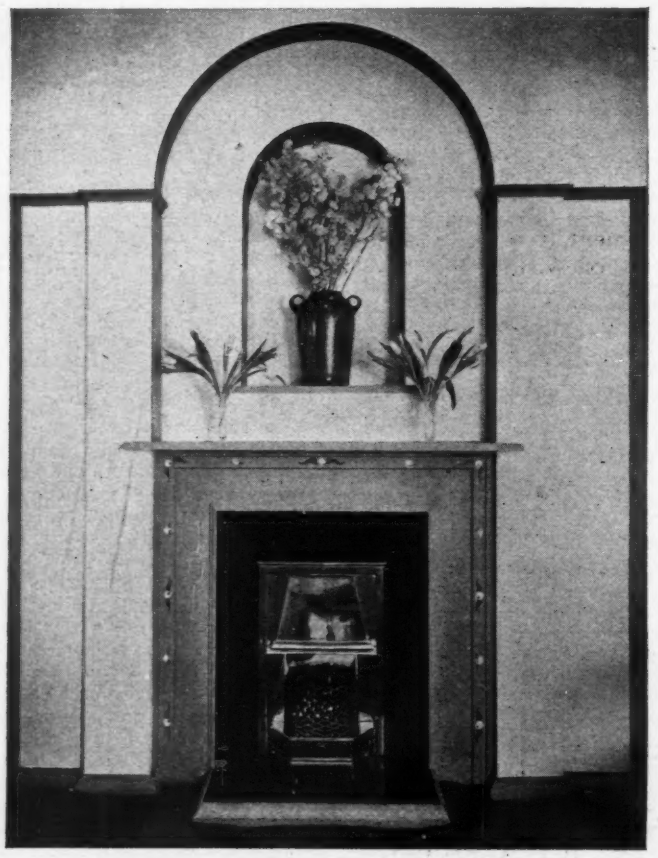
### Boycott v. Adkins and Harborne.

A case of interest to chemists, contractors, sewage and drainage experts and the like, was heard on March 17, 18 and 19, in the Nisi Prius Court at Birmingham Assizes, before Mr. Justice Finlay.

The action was one in which Edith Maria Boycott, the owner of the Red Bungalow, Astwood Bank, Worcestershire, claimed damages for the depreciation of her property through the alleged drainage and percolation of sewage from the adjoining property, known as Curley Vale. The defendants to the action were William Adkins, the tenant, and Alice Harborne (widow), owner of the adjoining property. Plaintiff also sought an injunction restraining defendants from causing any sewage or foul water to be diverted or to escape or to percolate from the adjoining property on to the property of the plaintiff.

Plaintiff was represented by Mr. H. H. Joy, K.C., and Mr. H. A. Tucker, defendants by Mr. J. F. Bourke, and Mr. S. L. Elborne watched the case on behalf of the Elsan Manufacturing Co., the manufacturers of the Elsan chemical closet, which was mentioned during the course of the hearing.

Delivering judgment, Mr. Justice Finlay characterised the case as an unfortunate one, and after reviewing in close detail the circumstances of the claim, referred to the lavatory arrangements at the Red Bungalow both prior to and after 1926. From 1920 onwards plaintiff and her husband used the latrine near the bottom of the garden, and from time to time the bucket was emptied and the contents buried. In 1926, plaintiff bought an appliance known as the Elsan chemical closet. From that period that closet was the one regularly used, "and," his lordship added, "I am quite satisfied from the fact that that closet was one which, if used properly in accordance with the directions, which appear quite simple, would prevent any nuisance, and I am of the opinion from the evidence, that the closet was properly used. There is no evidence before me that the nuisance, which undoubtedly exists, was caused by that closet. It has not really been seriously suggested, and it is only proper that I should say that." It was not necessary for him, continued his lordship, to trace in detail the real history of the nuisance. The evidence of plaintiff's two daughters satisfied him that it was developing, and that from about 1926 onwards there was clear evidence that it was becoming somewhat serious and that it was increasing. He was satisfied that both defendants knew quite well that whatever form the complaint took for a good long period there were complaints and those complaints were that their sewage was fouling the next garden. He thought the likeliest theory for the presence of crude sewage was that the ground was clay and that in clay there were often apparently veins of sand. Probably there was such a vein somewhere near the lower part of defendants' garden, and at that point defendants' land was slightly above plaintiff's. If he were compelled to pin himself to a theory it would be the theory that near the bottom of defendants' garden there was what might be called a fault, and through that this matter had persistently flowed and was still flowing from defendant's on to plaintiff's land. That disposed of the case and he felt constrained to hold that the defendants were liable. Judgment must be in favour of plaintiff and against both defendants, and he very much hoped, having decided that, that the parties would be able to agree upon an order which would give plaintiff what, in his opinion, she was entitled to—property free from this nuisance. If an arrangement could be made for connection with the main sewer, that would be by far the best course. With a view to saving the expenses of the parties he proposed to assess the damages on the basis that either the injunctien were granted or an undertaking given in fact on the basis that the nuisance was really going to be remedied. On that basis he thought £40 would be a fair sum to award as damages, and there would be judgment for this amount with costs.



**The new "Cobble" "Beam" Gas Fire.**

# CHOOSING A VOCATION

A NOVEL sociological experiment carried out by the Birmingham Education Authorities in collaboration with the National Institute of Industrial Psychology is described in a report entitled "The Value of Vocational Training as an Aid to Choice of Education."* The purpose of the experiment was to discover whether scientific tests of a child's "bent" and "aptitudes" formed a more reliable guide to employment than the usual method adopted at the school-leaving conference, where recommendations are based mainly on school reports and the general "impression" of the child gained in an interview. The three hundred odd boys and girls leaving three elementary schools in Birmingham in 1928 were divided by chance distribution into two groups, one forming the "tested" and one the "control" group. The children in the "tested" group were medically examined: intelligence and other special aptitudes were tested, and a "rating" was made of outstanding temperamental traits. The vocational recommendation was based on these findings. The "control" group were not tested, but advised in the ordinary way at the school leaving conference.

The careers of both groups were followed up over a period of two years, and their success or failure noted in relation to the advice given. In the tested group, 64 per cent. of the children whose first post was in accordance with the recommendation retained it for more than six months: 45 per cent. retained it over 18 months. Of those entering "non-accordance" posts only 26 per cent. remained more than six months and only 12 per cent. more than eighteen months. In the control group these indications are reversed, 45 per cent. retained posts for more than six months and 30 per cent. more than eighteen months; while of those in "non-accordance" posts 55 per cent. remained more than six months and 33 per cent. more than eighteen months. It seems likely that if such methods of assisting scientifically children in the choice of a career become universal, the waste to the nation caused by the placing of "square pegs" in "round holes" may be avoided. We commend the report to industrialists.

# GAS FIRES

SOME neat and attractive gas appliances were shown in the Gas Industries Section of the British Industries Fair which has just been held at Castle Bromwich, Birmingham. Improvement in gas fires continues to be made, one such being the "two fires in one." A gas fire forms the front part, but, if it is desired to convert it to its other use, a cover fits over the radiants, coke or some other smokeless solid fuel is piled on behind, and, with a special gas burner to light the fuel (no paper or wood is necessary), a cheerful fire is provided in the grate.

Gas fires of this type were shown at the exhibition as well as other gas appliances, such as gas cookers, water heaters, refrigerators, wash-coppers, and drying and airing cupboards. The claim which is made that the design of gas fires has greatly improved in recent years is justified beyond question, and this is no doubt the result of the co-operation of architects with the manufacturers. No doubt, in the near future, we shall see further developments, both as to design and setting, as there is no special reason why gas fires should be made in imitation of coal fires, which impose limitations on the designers, and already there are departures from the coal fire type showing a freer and more original treatment.

*"The Value of Vocational Training as an Aid to Choice of Education"; Report issued and obtainable from the Birmingham Education Committee, Council House, Market Street, Birmingham, or the National Institute of Industrial Psychology, Aldwych House, London, W.C.2 Price 1s.

# THE BUILDING TRADE

## THE LESSONS OF EXPERIENCE.—XIV

By J. R. TAYLOR.

### PLANNING COSTS.

The building industry, like others, has to endure cycles of prosperity and depression, but, unlike many of the other great manufacturing industries, it cannot do much to tide over times of difficulty by reducing the number of working days and devoting some of its energies to the production of stocks. Under the conditions that have prevailed in the post-war period one stand-by that was formerly available to the builder in quiet times has, to a very considerable extent, been cut off. For nearly a century before the war it was always open to a builder having or able to raise some capital at least to keep a proportion of his staff employed by building the class of cottage then usually occupied by workmen and their families. Houses of this sort, if they had any pretence to decency and comfort, always commanded tenants able and willing to pay economic rents, and builders erecting them seldom experienced any difficulty in selling them at a price that covered cost and overhead charges. The war put an end to this state of things, and nothing that has since happened has held out to the builder any hope of being able to resume along those lines. An examination of some of the underlying causes that at present restrain the activities of the builder may be of service.

Broadly speaking, in all commercial transactions, the sellers wish to sell before the prices of commodities fall and the buyers to buy before the rise. In markets that are continuously falling, the buyer endeavours to limit his orders to immediate requirements lest the goods he takes into stock depreciate in value before he can turn them over and take a profit on his transactions. When world prices are steadily falling through a number of years, as has happened in the post-war period with building, the investor is naturally reluctant to come in until he feels that they have touched bottom. This applies to many other things besides building. The trend of circumstances has been such that even those staunch supporters of our industry, the Building Societies, have thought it advisable temporarily to restrict somewhat their terms. I am, however, firmly convinced that building costs can now go no lower, and that whatever tendency they have to change during the next ten years will, on the whole, be in an upward direction. This, in the absence of any further adverse factors, should bring about some revival of the class of building that provides houses for the owner-occupier.

But the provision of what are commonly called working-class houses has by force of circumstances been taken a little outside the ordinary laws of supply and demand. To some extent this is attributable to a change in ideals, which has tended to increase the cost of building. To understand fully what has happened it is necessary to go back to the period 1900 to 1914. Certain large manufacturers had from mixed but entirely laudable motives decided to house their employees under better conditions. Having certain powers of selection they enjoyed certain advantages as compared with the ordinary house-owner, both in regard to security of rent and other matters that go to distinguish between the good, bad, and average tenant.

Later on, in the same period, finance was found by public-spirited, but shrewd, men of business for the erection of garden villages, not attached to any particular industrial concern, but with houses available to approved tenants. In one such undertaking the tenant-to-be was, and still is, required to put down a substantial deposit and/or take up shares in it as a preliminary qualification. The rents were, and still are, rather higher than would be required for an equal amount of accommodation in what was then the usual type of house, but the percentage that the rent bore to capital outlay was lower. On the whole, these undertakings secured an exceptionally good-class tenant and thus did not need to include in their calculations of the rents for such losses in rent as are normal. Further, as the undertaking was large enough to occupy a residential salaried estate agent a better control in regard to usage and repairs was possible.

With peace came the thousand-pound five roomed cottage. No sane builder could be persuaded into a belief that that could possibly last, and it became necessary for central and local governing bodies to undertake this class of housing. The Government could hardly be expected to do other than build along garden village lines; but the housing authorities are faced by a proposition that is very different from that of the private companies operating in 1914, and one in which the divergence is becoming ever wider. Owing to the enormous demand, for some years it was, and to a lesser extent still is, possible to select tenants without the housing committees being too obviously open to a charge of preferring the substantial to the needy tenant. Houses must be provided for all in need of them, and either the standards must go or private enterprise must continue to stand clear. There are those who see a possible solution in complete decontrol, but that is a matter that is too intimately concerned with politics, and so cannot here be discussed; but it may perhaps be said that decontrol of rents must carry with it decontrol of planning to a very large extent. The speculative builder, or, for that matter, any other builder, must when engaged on building cottages keep two things steadily in view—the cost and the return. The rent asked must be such as to attract tenants in the first place and retain them. Nothing is so damaging to cottage property as continuous changes of tenants. Every entry and removal of furniture causes damage to walls, particularly those to staircases, and not infrequently to doors and windows, and sometimes to floors. These removals also involve landlords in additional expense, because wallpapers that are clean though faded show up very badly when the pictures are taken down and furniture is removed exposing the patches of unfaded colours. The builder's problem, therefore, is to produce a house having a low rental but yielding a high return. In the pre-war period referred to, it was not easy to invest money in trustee securities that would yield a much higher rate than 4 per cent. At the same time builders were able to erect cottage property and sell it at prices on which the gross rents showed a gross return of 8 per cent. At all events, that was the position in a number of provincial towns, and variations from these figures do not vitiate the general line of the argument. Money invested at the present time in gilt-edged securities generally shows a better return than in that period; and consequently cottage property, to offer the same amount of attraction to investors, must show a proportionately higher return. Without the investor the builder cannot build.

It is obvious that houses cannot be erected as cheaply in blocks of two, four, and six as in ten, twenty, and thirty. Nor can houses be put up on garden-village lines at twelve, sixteen, or twenty to the acre as cheaply as when they usually numbered about thirty to the acre. I do not advocate a return to those times, but merely set out some of the reasons that operate to restrain private enterprise in this direction. Additional roads, fences, paths, drains, water and gas supplies all add something to the total cost per house. I have seen it stated that greater density does not necessarily reduce the amount of roadway required for each house; but town-planning, besides separating the blocks of houses, does, if it is logical, extend frontages. The pre-war builder put up houses on narrow frontages that, if of a parlour type, were three rooms deep. Paying some regard to aspect, the town or garden-village planning architect plans for houses on wide frontages and two rooms deep. As a result, not only does the amount of road frontage charges go up, but the average costs are increased by the higher proportion of external walling that becomes necessary. Thus the cost per foot superficial of accommodation is not only higher by reason of the general increase in costs of building, but by reason of changes in planning.

From the would-be investor's point of view, the next point is maintenance costs. Putting all other matters on one side, these would be *pro rata* to the general increase in building costs; but we cannot put other matters on one side because the facts refuse to be ignored. The greater amount of external surface means that a greater extent of building is subjected to weather exposure, and this has an important bearing on maintenance costs. So far, then, we have greater proportionate first cost and higher maintenance costs on the one hand, and, on the other, but meagre prospects of obtaining rents to yield an attractive return, even where, as in some cases, a subsidy is to a certain extent and on certain conditions available.

One other point is that, with greater exposure, it is inevitable that we shall sooner or later have to give consideration to the fact that a very high proportion of the houses put up in the post-war period do not offer sufficient resistance to weather. Every winter that passes makes this abundantly clear in the reports of meetings of housing authorities in all parts of the country. As a result, money that should be accumulating against the time when renewals will become necessary has to be disbursed in mitigating some of the immediately pressing evils. From the same sources come reports of huge arrears of rents in areas suffering under depression. All who know anything of the management of cottage property know that a certain proportion of rent in arrear can never be collected. Under the old system many property-owners, when they found that the net income was falling off by reason of growing need for repair, sold the property. The new owner took the best yield he could squeeze out and sold again. As the property deteriorated in value so the better-class tenant fled to newer property, and so in process of time came the slums. It is inconceivable that we should make a national effort to clear up slumdom only to let housing fall back into a similar state; yet this cannot be avoided unless a definite standard of good repair be made obligatory. From this it follows that, unless the gross rents can be made to provide the ample margin necessary, cottage property is not likely to attract private capital again. The alternatives are obvious and need not be laboured.

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**Stype Grange, Hungerford.**

Stype Grange, Hungerford, Berkshire, was almost entirely destroyed by a fire which broke out on Sunday last. The mansion, which was rebuilt during the war, contained some fine paintings and mezzotints of the British School. The owner is the Hon. W. Ronald Whiteley.

# READING BUILDERS' ANNUAL DINNER

THE annual dinner of the Reading and District Building Trades Employers' Association was held at the Caversham Bridge Hotel recently, when Mr. L. A. Peyman (President) occupied the chair. Amongst the large number of guests and members present were: the Mayor (Alderman E. O. Farrer) Messrs. Sydney Tatchell, W. J. Brooker, A. Cannon, T. Lawrence Dale, A. Saxon Snell, R. L. Roberts, H. C. Goodall, H. J. Bowyer, A. T. Doe, and H. Hutt.

Mr. W. E. Collier submitted the toast of "The Mayor and Corporation of Reading," and said the town had learned with pleasure that the rate was to be reduced by a further twopence in the pound, this following the eightpenny reduction of the previous year. The decision of the Council to give relief to the ratepayers was a wise one. On that score they had no cause for complaint, but there was one important matter to which he would like to call attention. In the country's financial crisis last year the Ministry of Health called upon local councils to make drastic reductions in their expenditure, and as a result those bodies had to abandon or postpone many valuable works which otherwise would have been done. In Reading the figure was £196,000, a substantial sum for a borough of its size. Not only had the Corporation cut down expenditure, but private enterprise had been discouraged, for it had been compelled to adjourn its activities for a time in order to meet the special circumstances which arose. This had led to depression, almost stagnation, in the building industry. The building industry recognised that, with other trades, it must take its share of the suffering which had fallen to the lot of industry. But it asked that there should be reconsideration of the Council's decision to postpone so many works, to see if some of them were not of a character which would make it wise and proper to undertake them. He thought the local authority, in their eagerness to respond patriotically to the call of the Ministry, had gone to an extreme which was not justified and which was having serious consequences, and asked that the situation might be again reviewed. Mr. Collier closed his speech with an appeal to private people to have their building done now, when the cost had fallen to as low a figure as it was likely to fall, and when, to speak figuratively, many builders were cutting each other's throats in order to get work.

In his reply, the Mayor commented on the schemes which had had to be abandoned, and said the Council proposed, with the consent of the Ministry of Transport, to reconstruct Crown Bridge, High Bridge, and Factory Bridge, but of these three, owing to the need for economy expressed by the Government in the present financial crisis, only one had been proceeded with, that one being Crown Bridge. That improvement was undoubtedly necessary, and would greatly improve one of the main streets of the town. The economy proposals of the Government had, unfortunately for the building trade of the town, postponed work on education reorganisation and development, plans for the expenditure on school buildings of a large amount having been either delayed or abandoned. All sincerely hoped that the present financial crisis was only a temporary one, and there were signs that by the time he vacated the chair there might be a silver lining to the cloud.

Proposing "The Southern Counties Federation of Building Trade Employers," the chairman outlined the many advantages builders could derive from membership of the Federation. They heard it said that the Federation was an organisation for the maintenance of high prices, but this was an allegation which they could refute. The Federation provided them with a number of warm-hearted and sincere friends who were ready to help and advise on technical and practical points, but when it came to competition for work they found that their friends could be the "most unholy lot of cut-throats."

The toast was acknowledged by Mr. W. J. Brooker, who spoke in terms of condemnation of the builders who took advantage of the benefits the Federation had secured without contributing a penny piece to its upkeep.

The happy relations existing between architects and builders was spoken of by Mr. A. S. J. Elliott, who proposed the toast of "The Architects," to which Mr. Sydney Tatchell replied. The health of the guests was honoured on the call of Mr. J. Smallbone, Mrs. Peyman and Mr. R. L. Roberts responding.

# LIABILITIES OF ADJOINING OWNERS

A SOMEWHAT unusual case—Wilkins *v.* Leighton—is reported in the *Weekly Notes*, March 19, raising a point as between adjoining owners of house property. The plaintiff in the action was the owner of a house at Boscombe which had been built in 1888 on a somewhat steep slope towards the sea. The road upon which it abutted ran through a stratum of sand and gravel, and when the house was erected, in order to secure a foundation, the ground was excavated to a depth of 13 ft. on the upper side, and on the face of this part of the land thus left exposed by the excavation, as the report states, "to prevent it weathering," a retaining wall was erected 70 ft. in width and 13 ft high. In 1925 the owner of the land higher up the hill, but bounded by this wall, or rather by the excavation it retained, built a house upon that site, and this house, when completed in 1926, was purchased by the defendant in this action.

In 1928 a portion of the plaintiff's wall had fallen and been rebuilt, but the Court found this fall to have been caused by the pressure of a gale on a high wattle fence placed against the wall, but in February, 1930, the wall collapsed for almost its whole length, and this the Court found was due to the additional thrust on the wall caused by the defendant's building.

The plaintiff brought this action against the defendant, basing his claim on two grounds—(1) on the principle laid down in Rylands *v.* Fletcher (1868, L.R.H.L. 330), and (2) on the ground of nuisance. The Court disallowed the claim on both grounds, holding that the decision in the case St. Anne's Well Brewery Co. *v.* Roberts (1928, C.A. 140, L.T.1), a case not reported in the *Law Reports*, covered the case. In that case the plaintiffs were the owners of an ancient inn bounded by the old city wall of Exeter, and at some time unknown, on either side of the fireplace in the kitchen recesses had been formed by excavations made in the wall. Portion of this wall belonging to the defendants had collapsed, demolishing the plaintiff's inn, and it was held in that case that, as the damage to the plaintiff's premises did not arise from an abnormal or unnatural user of the wall, the property of the defendants, and the defendants were not occupiers of the wall at the time the damage took place, the doctrine of Rylands *v.* Fletcher had no application, and as regards nuisance, it had not been proved that the defendants had knowledge of the defect which ultimately resulted in the fall of the wall, nor had there been any failure on their part in exercising due diligence in ascertaining there was such a defect.

In the case we are considering, there appears to have been an allegation of negligence in not having carried the foundations of the house to a much greater depth, so as to ensure the safety of the plaintiff's property, and the principle of Rylands *v.* Fletcher, as well as of nuisance, appears to have been based on this, and in the brief report at present available there is no direct finding on this point, except as stated above, that Rylands *v.* Fletcher has no application to the normal use of land, and that in fact there was no evidence that the defendant had caused any nuisance.

In Portadawe Rural District Council *v.* Moore-Gwyn (1929, 1 Ch. 656; *The Builder*, March 15, 1929), where a fall of rock from a bluff or cliff on the boundary of the defendant's land had damaged the house of the second plaintiff, the Council alleged that a nuisance under section 91 of the Public Health Act, 1875, existed, whilst the second plaintiff claimed for the damage to the house on the ground of a common law nuisance, but the actions were dismissed on the authority of a statement contained in Blake *v.* Woolfe (1898, 2 Q.B. 426), which had also been approved by the Privy Council in Rickards *v.* Lothian (1913, A.C. 263) to the following effect: "The general rule as laid down in Fletcher *v.* Rylands is that *prima facie* a person occupying land has an absolute right not to have his premises invaded by injurious matter such as a large quantity of water which his neighbour keeps on his land. The general rule is, however, qualified by some exceptions, one of which is that where a person is using his land in the ordinary way, and damage happens to the adjoining property without any default or negligence on his part, no liability attaches to him."

But the unusual feature of the case we are considering appears to us to be that the action was not one raising questions as to the right to support, which might have been the case had the owner of the house on the higher level been claiming against the owner of the house below him for defect in the support from the wall (though on this point see Sack *v.* Jones, 1925, Ch. 235; *The Builder*, April 17, 1925), but an action brought by the owner of a house who has made an excavation on his land against his neighbour for having imposed additional weight or thrust upon the retaining wall by building on his own land, and, as was found by the Court in this case in a perfectly normal manner. Had the house, however, been placed so close to the excavation made for the plaintiff's house as to create an obvious danger to the retaining wall, it is possible that this might have been held such a use of the land as to create a nuisance, although we express no definite opinion on the point, but apart from the question as to the depth of the foundations, there appears in this case from the brief report yet available to have been nothing unusual or negligent in the defendant's use of his land.

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**Caernarvonshire Builders.**

AT the annual meeting of the Caernarvonshire and Anglesey Building and Kindred Employers' Association at Bangor, on January 15, Mr. Leonard Jones was elected President for the ensuing year, with Mr. Owen Evans, Menai Bridge, as Vice-President. Mr. A. Marshall was appointed Junior Vice-President. It was announced that a move had been made in the direction of forming a Joint Builders' and Architects' Board for the area, and several members declared that it was long overdue.

Reference was made to a scheme for training building apprentices in the area at the Central Schools. The scheme will be forwarded to the Education Authorities of the two counties.

**Hydration of Lime in Cement**

Published by the Department of Scientific and Industrial Research, Building Research Special Report No. 17—The Estimation of Free Calcium Oxide and Hydroxide—has been issued, price 6d. net, from H.M. Stationery Offices. A knowledge of the amounts of hydrated and unhydrated free lime in cements and other building materials is frequently of the utmost importance. The complexity of many of those materials, however, makes the accurate estimation of free lime a matter of considerable difficulty. Apart from the methods made available or suggested by other investigators, certain methods have been modified or developed at the Building Research Station. All these methods are reviewed comprehensively in this Special Report, to which the architect's and engineer's attention is commended.

# NEW BUILDINGS IN LONDON

**Acton.**—Shops.—An arcade of shops is to be erected in Old Oak Common-lane, W.3. The contract will be carried out by Mr. J. A. Perriss, 156, East Acton-lane, W.3.

**Barking.**—Hotel.—Plans have been prepared for an hotel at the junction of Gale-street and Hedgeman's-road, for Messrs. Barclay, Perkins & Co., Ltd., Park-street, Southwark. The estimated cost is about £20,000. The company have their own architectural staff.

**Barking.**—Premises.—The T.C. has passed plans for the Barking United Services Club, Ltd., for club premises in Blake-avenue.

**Bartholomew-lane.** — Rebuilding. — Plans have been prepared for a rebuilding scheme which is to be undertaken at the head offices of the Alliance Assurance Co., Ltd. The architects are Messrs. Joseph, 2, Paul's Bakehouse-court, E.C.4, who are acting in conjunction with Messrs. Mewes and Davis, 22, Conduit-street, W.1.

**Boreham Wood.**—Buildings.—A block of buildings of steel-framed and reinforced-concrete construction is to be erected for a syndicate interested in the moving-picture industry, and will comprise shops, flats, restaurant and miniature theatre, with conference-rooms. Messrs. Pelham Palgrave and Partners, Hanover House, Hanover-square, W.1, are the architects retained for the scheme.

**Covent Garden.** — Alterations. — Messrs. E. A. Shaw and Partners, 4, Broad-court, Long-acre, W.C.2, are the architects for alterations to the old premises of the National Sporting Club, King-street, for Messrs. Geo. Monro, Ltd. The builders are Messrs. Holland and Hannen and Cubitts, Ltd., 1, Queen Anne's-gate, S.W.1.

**Croydon.**—Alterations.—We understand that alterations and additions are to be made to 44 and 46, Church-street, for Messrs. MacFisheries, Ltd., 30, New Bridge-street, E.C.4.

**Dagenham.** — Hotel. — Messrs. Mann, Crossman and Paulin, Ltd., brewers, Whitechapel-road, E.1, are proposing to erect new licensed premises at the junction of Romford-road and Foxlands-road. Nothing definite has yet been settled.

**East Ham.**—Factory.—A steel-framed factory is to be erected on the north side of Greenhill-grove. The plans have been prepared by Mr. Thomas Anders, architect, Beehive Estate, off Eastern-avenue, Ilford. The building work will be carried out by the owner, who has placed the steelwork contract with Messrs. Norton Bros., of Ilford.

**Edgware.**—Workshops.—A new block of motor repair workshops is to be erected in Hale-lane. Messrs. G. Oram and Son, 12, The Quadrant, Edgware, are the builders.

**Edmonton.**—Premises.—Messrs. Charrington and Co., Ltd., Anchor Brewery, Mile End-road, E.1, propose to erect licensed premises at the junction of the new Cambridge-road and the North Circular road.

**Edmonton.**—Hall.—A site has been acquired in Houndsfield for a new billiards hall, etc. The plans have been prepared by Messrs. H. Seymour Couchman & Sons, 520, High-road, Tottenham, N.17. No contracts have been placed as yet.

**Eltham.**—Hotel.—Plans have been prepared by Messrs. Eley and Allen, 83, Powis-street, Woolwich, S.E.18, for an hotel having frontages to the Sidcup by-pass road and Green-lane, for Mr. C. Beasley, The Brewery, Woolwich, S.E.18.

**Finchley.**—Extensions.—We understand that Mr. Harold Goslett, F.R.I.B.A., 23, Theobald's-road, W.C.1, has prepared plans for extensions to the Memorial Hospital at Granville-road, N.12.

**Great West-road.** — Station. — Plans are being prepared for a new service depot in the Great West-road, for the Armstrong-Saurer Commercial Vehicles, Ltd., Broadway Buildings, S.W.1. The company have their own architectural staff.

**Hornsey.**—Clinic.—For the erection of a school clinic, the Town Council has recommended for acceptance the tender of Messrs. J. and L. Read, 181, Queen's-road, Watford, for the sum of £5,658.

**Houndsditch.**—Premises.—A contract has been placed for a block of business premises and stores at the corner of Houndsditch and Stoney-lane, E.C.1, with Messrs. F. and H. F. Higgs, Ltd., Station Works, Hinton-road, Herne Hill, S.E.24. The cost is estimated at approximately £200,000. Plans have been prepared by Messrs. Lewis Solomon and Sons, 21, Hart-street, Bloomsbury, W.C.1. The quantity surveyors are Messrs. Henry Gritten and Son, 21, Hart-street, W.C.1.

**Ilford.**—Schools.—The T.C. are proposing to build two new schools to accommodate 900 pupils at Barkingside and Chadwell Heath.

**Kingsbury.**—Additions.—Plans have been prepared by Mr. E. N. Smallwood, architect to the Express Dairy Co., Ltd., Tavistock-place, W.C.1, for additions at the branch depot at the junction of Berkeley-road and Kingsbury-road. The contract has been placed with Mr. H. Brown, College Hill-road, Harrow Weald.

**Kingston.** — Additions. — Messrs. Yetts, Sturdy and Usher, 34, Gordon-square, W.C.1, are the architects for additions to the "Old Crown" public-house, Crown-passage.

**Kingston.** — Additions. — Messrs. T. E. Davidson, Son and Sherwood are the architects for additions to the First Church of Christ Scientist, Penrhyn-road.

**Lambeth.**—Shops.—The United Dairies, Ltd., have applied to the B.C. for consent to erect a shop upon a site on the north side of Crown-lane, next to No. 276, Knight's-hill. The company's architect is Mr. F. T. Dear, A.R.I.B.A., Palace-court, W.2.

**Lambeth.**—Buildings.—Mr. E. W. Wallis, architect, 395, Norwood-road, S.E.27, has submitted an application to the B.C. for the erection of an additional building upon a site approached by a way out of the north-west side of Auckland-hill and west side of Pilgrim-terrace.

**Limehouse.**—Extensions.—For further extensions to the generating station, the Stepney B.C. has placed a contract with the Ashford Builders' Co., Ltd., 3, Bloomsbury-place, W.C., for the building work, at £21,845.

**Mill Hill.**—Alterations.—Premises at the corner of the Broadway and Flower-lane are to be altered for new motor showrooms for Messrs. Warren Motors, Ltd., 53, Eden-street, N.W. The contractors are Messrs. Notley, Ltd., Broadway, Mill Hill, N.W.7.

**Stepney.**—Building.—Messrs. Stock, Page and Stock, architects, 18, St. Thomas-street, S.E.1, have submitted an application to the B.C. for the erection of a building upon the site of 45-53, London-street, to abut upon Medland-street and approach road to tunnel.

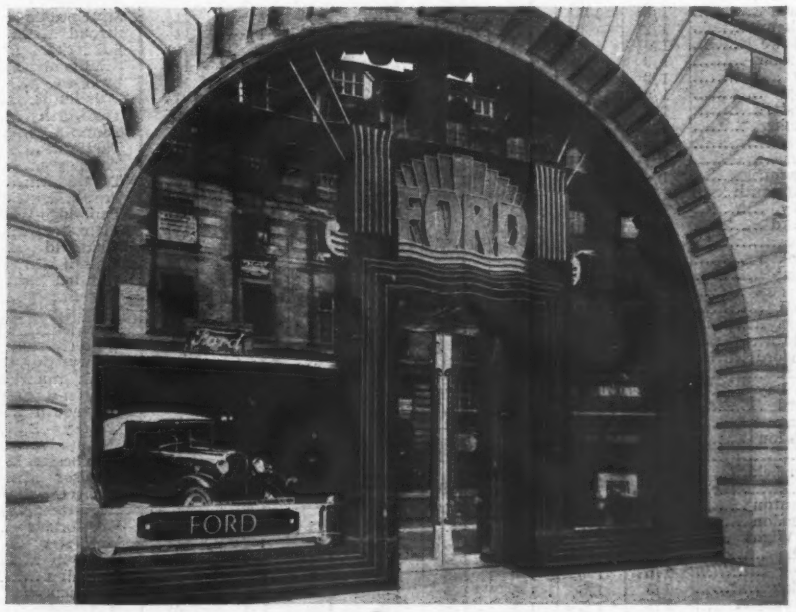
**Watford.**—Extensions.—A scheme of extensions is proposed at the factory premises of the Grosvenor Electric Batteries, Ltd., of 2, White-street, E.C.2, which will involve an expenditure of about £40,000.

**Western-avenue.**—Hotel.—Messrs. Fuller, Smith and Turner, Ltd., brewers, Griffin Brewery, Chiswick, W.4, have under consideration the erection of a new hotel at the corner of Western-avenue and Long-lane, the cost of which is estimated at about £12,000. The plans have been prepared by Mr. Nowell Parr, F.R.I.B.A., 42, Cranley-gardens, South Kensington, S.W.7.

## NON-REFLECTING WINDOW

An invention which succeeds in abolishing reflection on shop windows has been made by an English designer, Mr. Gerald Brown, who has applied the scientific principle that a concave sheet of glass can be so arranged that from whatever point the window display is viewed by the shopper on the pavement, all undesirable reflections are lost to view, that is to say, the rays of light falling upon the surface of the glass are always reflected away from the eye. These angles are all calculated, and at the top and bottom of the shop window are arranged baffle-boards, the surfaces of which are prepared dead black. It is upon the dead-black surfaces of these baffles that every ray of light reflected from the window falls and is absorbed. The eye, therefore, is completely undisturbed, indeed, is unconscious of any reflection whatsoever. In addition to this virtue, the light from the sky is also reflected into the interior of the shop, so that articles on show therein, especially colourful articles, appear in their correct values instead of looking nondescript and disappointing, as is so often the case when viewed through the reflections on ordinary plate glass windows.

The first building in London to which this new invention has been applied is the Ford Motor Company's showroom in Regent-street, W., the entrance of which was also designed by Mr. Brown in collaboration with Messrs. Charles Heathcote and Sons, FF.R.I.B.A. It is very possible that all important shops—especially those with deep windows, such as furniture shops and automobile showrooms, which are particularly troubled by bad reflections—will come to be fitted with such windows. The installation of these non-reflecting windows is being effected through Messrs. E. Pollard & Co., Ltd.




**A Shop Front with non-reflecting window in Regent Street.**

# RATES OF WAGES IN THE BUILDING TRADE

**AS AND FROM 1st FEBRUARY, 1932.**

**[Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.]**

| | Masons. | Brick-layers. | Car-penters Joiners. | Plas-terers. | Slaters. | Plum-bers. | Pain-ters. | Lab-ourers. |
|---|---|---|---|---|---|---|---|---|
| Aberdare | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/1½ |
| Accrington | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Aldershot | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/6 | 11 |
| Alfreton | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Alnwick | 1/5 | 1/5 | 1/5 | 1/5 | 1/6 | 1/5 | 1/6 | 1/0½ |
| Altrincham | 1/6 | 1/6 | 1/6 | 1/5 | 1/6 | 1/5 | 1/6 | 1/1½ |
| Ashford (Kent) | 1/2½ | 1/2½ | 1/2½ | 1/6 | 1/6 | 1/2½ | 1/2½ | 11 |
| Ashington | 1/5 | 1/5 | 1/5 | 1/5 | 1/6 | 1/5 | 1/6 | 1/0½ |
| Ashton-under-Lyne | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Aylsham | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/6 | 11 |
| Banbury | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/6 | 11½ |
| Barnsley | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Barnstaple | 1/4 | 1/4 | 1/4 | 1/4 | 1/6 | 1/4 | 1/4 | 1/- |
| Barrow-in-Furness | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Barry | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Basingstoke | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 11½ |
| Bath | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/0½ |
| Bedford | 1/4½ | 1/5 | 1/5 | 1/5 | 1/5 | 1/4½ | 1/5 | 1/0½ |
| Berwick | 1/5 | 1/5 | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/0½ |
| Bexhill | 1/3½ | 1/3½ | 1/8 | 1/9 | 1/8 | 1/8 | 1/8 | 11½ |
| Birkenhead | 1/8 | 1/8 | 1/8 | 1/6 | 1/6 | 1/6 | 1/6 | 1/3½ |
| Birmingham | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Bishop Auckland | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/1½ |
| Blackburn | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Blackpool | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 11½ |
| Bognor Regis | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/1½ |
| Bolton | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/0½ |
| Bournemouth | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/6 | 1/1½ |
| Bradford | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 11 |
| Bradford-on-Avon | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/4 | 1/- |
| Braintree | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/5 | 1/0½ |
| Brentwood | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 11½ |
| Bridgwater | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/5½ | 1/1½ |
| Bridlington | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/4½ | 1/0½ |
| Brighton | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/6 | 1/1½ |
| Bristol | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/0½ |
| Bromsgrove | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 10½ |
| Bromyard | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 10½ |
| Bungay | 1/1½ | 1/1½ | 1/1½ | 1/1½ | 1/1½ | 1/1½ | 1/1½ | 1/1½ |
| Burnley | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Burton-on-Trent | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Bury | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 11½ |
| Bury St. Edmunds | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/1½ |
| Buxton | 1/5½ | 1/5½ | 1/5½ | 1/3 | 1/5½ | 1/5½ | 1/5 | 1/0½ |
| Cambridge | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 11½ |
| Canterbury | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/1½ |
| Cardiff | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Carlisle | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/- |
| Chatham | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/- |
| Chelmsford | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/0½ |
| Cheltenham | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/6 | 1/4½ | 1/6 | 1/0½ |
| Chester | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Chesterfield | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Chorley | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Cirencester | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/1½ |
| Clacton | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/1½ |
| Colchester | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/6 | 1/1½ |
| Coventry | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Cranbrook | 1/1½ | 1/1½ | 1/1½ | 1/1½ | 1/1½ | 1/1½ | 1/5 | 1/0½ |
| Crewe | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/0½ |
| Cromer | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/6 | 1/1½ |
| Darlington | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 11 |
| Deal | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/0½ |
| Denbigh | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/6 | 1/1½ |
| Derby | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 11 |
| Devizes | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/6 | 1/1½ |
| Dewsbury | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Doncaster | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 11½ |
| Dorchester | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 11½ |
| Dorking | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/6 | 1/0½ |
| Dovercourt | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/1½ |
| Driffield | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/5 | 1/- |
| Droitwich | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/6 | 1/0½ |
| Dudley | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Durham | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Eastbourne | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 11½ |
| E.Glam.(Mon.Val.) | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/0½ |
| Ely | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/6 | 1/0½ |
| Exeter | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/6 | 1/0½ |
| Exmouth | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/6 | 11½ |
| Fakenham | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/4½ | 11½ |
| Felixstowe | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/6 | 1/1½ |
| Folkestone | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/0½ |
| Frome | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/6 | 11½ |
| Glossop | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Gloucester | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/1½ |
| Godalming | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/5½ | 1/1½ |
| Goole | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/1½ |
| Gosport | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/6 | 1/1½ |
| Grantham | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/6 | 11½ |
| Gt. Yarmouth | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/6 | 1/1½ |
| Grimsby | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Guildford | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/6 | 11½ |
| Halifax | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Harpenden | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/6 | 1/1½ |
| Harrogate | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Hartlepools | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Harwich | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/6 | 1/- |
| Hastings | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 11½ |
| Hatfield | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/0½ |
| Hednesford | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/0½ |
| Hereford | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/0 |
| Herne Bay | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/4½ | 1/0½ |
| Hertford | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/0½ |
| Hitchin | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 10½ |
| Hoddesdon | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/1½ |
| Holt | 1/1½ | 1/1½ | 1/1½ | 1/1½ | 1/1½ | 1/1½ | 1/6 | 1/1½ |
| Huddersfield | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 11 |
| Hull | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/2½ |
| Hunstanton | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/3 | 11 |
| Huntingdon | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/2½ |
| Isle of Wight | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/4½ | 1/0½ |
| Ipswich | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/6 | 1/1½ |
| Keighley | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/0½ |
| Kettering | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/0½ |
| Kidderminster | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 11½ |
| Kings Lynn | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/1½ |
| Lancaster | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Leamington Spa | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/0½ |
| Leeds | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Leicester | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Leighton Buzzard | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 11 |
| Lichfield | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/0½ |
| Lincoln | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Littlehampton | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/1½ |
| Liverpool | 1/8 | 1/8 | 1/8 | 1/9 | 1/8 | 1/8 | 1/8 | 1/1½ |
| Llandudno | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/0½ |
| Llanelly | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| London— | | | | | | | | |
| 12 m. radius | 1/7½ | 1/7½ | 1/7½ | * | 1/7½ | 1/7½ | 1/6½ | 1/2½ |
| 12-15 m. radius | 1/7 | 1/7 | 1/7 | 1/6 | 1/7 | 1/7 | 1/6 | 1/2½ |
| Loughborough | 1/6 | 1/6 | 1/6 | 1/3½ | 1/6 | 1/6 | 1/6 | 1/1½ |
| Lowestoft | 1/3½ | 1/3½ | 1/3½ | 1/4½ | 1/3½ | 1/3½ | 1/3½ | 11½ |
| Luton | 1/4½ | 1/4½ | 1/4½ | 1/5½ | 1/4½ | 1/4½ | 1/4½ | 1/0½ |
| Macclesfield | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/4 | 1/5½ | 1/5½ | 1/1½ |
| Maidstone | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/- |
| Malvern | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/0½ |
| Manchester | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Mansfield | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Margate | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/6 | 11½ |
| Market Harborough | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/0½ |
| Matlock | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/0½ |
| Melton Constable | 1/1½ | 1/1½ | 1/1½ | 1/1½ | 1/1½ | 1/1½ | 1/1½ | 1/0½ |
| Melton Mowbray | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/1½ |
| Merthyr Tydfil | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/6 | 1/1½ |
| Middlesbrough | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/0½ |
| Newark | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 11½ |
| Newbury | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/1½ |
| Newcastle-on-Tyne | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Newcastle-u-Lyme | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 11½ |
| New Forest | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/1½ |
| Newmarket | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/6 | 1/1½ |
| Newport, Mon. | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/0½ |
| Northampton | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/1½ |
| Norwich | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/1½ |
| Nottingham | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Nuneaton | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/0½ |
| Oakham | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/6 | 1/0½ |
| Oldham | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/5 | 1/0½ |
| Oxford | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/0½ |
| Paignton | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/1½ |
| Peterborough | 1/5 | 1/5 | 1/5 | 1/5 | 1/6 | 1/5 | 1/6 | 1/1½ |
| Plymouth | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/5½ | 1/5½ | 1/0½ |
| Pontypridd | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/4½ | 1/4½ | 1/1½ |
| Portsmouth | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/6 | 1/6 | 11½ |
| Preston | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/3½ | 1/3½ | 1/0½ |
| Ramsgate | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/5 | 1/5 | 1/5 | 1/1½ |
| Reading | 1/5 | 1/5 | 1/5 | 1/5 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Redcar | 1/6 | 1/6 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/0½ |
| Redditch | 1/5 | 1/5 | 1/4 | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/1½ |
| Reigate | 1/4 | 1/4 | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/1½ |
| Retford | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/6 | 1/4½ | 1/6 | 1/1½ |
| Ripon | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 11½ |
| Rochdale | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 11½ |
| Rochester | 1/6 | 1/6 | 1/6 | 1/2 | 1/6 | 1/6 | 1/6 | 1/0½ |
| Rugby | 1/2 | 1/2 | 1/2 | 1/3½ | 1/2 | 1/4½ | 1/4½ | 1/1½ |
| Saffron Walden | 1/5 | 1/5 | 1/5 | 1/6 | 1/5 | 1/6 | 1/6 | 1/1½ |
| St. Albans | 1/6 | 1/6 | 1/6 | 1/1½ | 1/6 | 1/6 | 1/6 | 1/1½ |
| St. Helens | 1/3½ | 1/3½ | 1/3½ | 1/2½ | 1/5 | 1/2½ | 1/6 | 1/1½ |
| Sawbridgeworth | 1/2 | 1/2 | 1/2 | 1/3 | 1/6 | 1/3 | 1/6 | 1/1½ |
| Saxmundham | 1/5½ | 1/5½ | 1/5½ | 1/4½ | 1/6 | 1/4½ | 1/6 | 1/1½ |
| Scarborough | 1/4 | 1/4 | 1/4 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Sevenoaks | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Sheffield | 1/5 | 1/5 | 1/5 | 1/2½ | 1/5 | 1/2½ | 1/6 | 1/1½ |
| Shrewsbury | 1/2½ | 1/2½ | 1/2½ | 1/5 | 1/6 | 1/5 | 1/6 | 1/1½ |
| Sittingbourne | 1/5 | 1/5 | 1/5 | 1/6 | 1/6 | 1/5 | 1/6 | 1/1½ |
| Southampton | 1/5 | 1/5 | 1/5 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Southend-on-Sea | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Southport | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| South Shields | 1/4 | 1/4 | 1/4 | 1/4 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Stevenage | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Stockport | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Stockton-on-Tees | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/5½ | 1/6 | 1/1½ |
| Stoke-on-Trent | 1/6 | 1/6 | 1/6 | 1/5½ | 1/6 | 1/6 | 1/6 | 1/1½ |
| Stourbridge | 1/5½ | 1/5½ | 1/5 | 1/5 | 1/5½ | 1/5 | 1/5½ | 1/1½ |
| Stourport | 1/5 | 1/5 | 1/2½ | 1/2½ | 1/5 | 1/2½ | 1/4½ | 1/1½ |
| Stowmarket | 1/2½ | 1/2½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4 | 1/- |
| Stratford-on-Avon | 1/4½ | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/6 | 1/1½ |
| Stroud | 1/4 | 1/4 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Sunderland | 1/6 | 1/6 | 1/1½ | 1/1½ | 1/6 | 1/1½ | 1/6 | 1/1½ |
| Swaffham | 1/1½ | 1/1½ | 1/6 | 1/6 | 1/1½ | 1/6 | 1/6 | 1/1½ |
| Swansea | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Swindon | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/1½ |
| Tamworth | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/4½ | 1/5½ | 1/5½ | 1/1½ |
| Taunton | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/1½ |
| Thetford | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/5 | 1/1½ |
| Torquay | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/1½ |
| Totnes | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/6 | 1/1½ |
| Trowbridge | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/4 | 1/1½ |
| Tunbridge Wells | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/1½ |
| Uttoxeter | 1/4 | 1/4 | 1/4 | 1/4 | 1/6 | 1/4 | 1/6 | 1/1½ |
| Wakefield | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Walsall | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Walsden | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Warminster | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/6 | 1/1½ |
| Warrington | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Warwick | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/6 | 1/1½ |
| Wells (Norfolk) | 1/1½ | 1/1½ | 1/1½ | 1/1½ | 1/1½ | 1/1½ | 1/5 | 1/1½ |
| Welwyn Gar. City | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/6 | 1/1½ |
| West Bromwich | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Weston-super-Mare | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/1½ |
| Weymouth | 1/3 | 1/3 | 1/3 | 1/3 | 1/5 | 1/5 | 1/5 | 1/1½ |
| Whitby | 1/5 | 1/5 | 1/5 | 1/5 | 1/6 | 1/5 | 1/6 | 1/1½ |
| Wigan | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Winchester | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/3½ | 1/1½ |
| Windsor | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/1½ |
| Wisbech | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/1½ |
| Wolverhampton | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |
| Woodbridge | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/2½ | 1/5 | 1/1½ |
| Worcester | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/1½ |
| Worksop | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/1½ |
| Worthing | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/1½ |
| Wrexham | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/5½ | 1/1½ |
| Wycombe | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/4½ | 1/1½ |
| Wymondham | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/0½ |
| York | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/1½ |

*The rate recognised by the National Association of Plasterers, Granolithic and Cement Workers, as and from the 1st February, 1932, is 1/9½ per hour.

For Building Trade wages in Scotland, see page 624.

# CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender, that a fair wages clause shall be observed, that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

*The date given is the latest date when the tender, or the names of those willing to submit tenders, may be sent in, the name and address at the end is the person from whom or place where quantities, forms of tender, etc., may be obtained.*

Following is a list of abbreviations:—Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S.; Engineer, E.

## BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

### APRIL 4.

**Bodmin.**—Reinstating.—Of rooms, for Directors of Bodmin Public Rooms Co., Ltd. Tonar & Drury, L. & A.R.I.B.A., 16, Bedford-circus, Exeter. Dep. £2 2s.

**Chester.**—Alterations, etc.—At Upton Mental Hospital. County Architect, The Castle. Dep. £2 2s.

**Cowbridge.**—Wall.—Boundary wall at Llanharan housing site, for R.D.C. E. Loveluck, A.R.I.B.A., 12, Dunraven-place, Bridgend.

**Daventry.**—Houses.—16 houses for R.D.C. J. B. Williams, architect, The Moot Hall. Dep. £1.

**Doncaster.**—Houses.—250 on Intake site, for C.B. R. E. Ford, Housing Surveyor, 3, Priory-pl.

**Kidderminster.**—Alterations.—Classrooms with other alterations at Foley Park Schools, for E.C. Pritchard, Godwin & Clist, architects, Bank-bldgs. Dep. £2.

**Kingswinford.**—Houses.—Six non-parlour type on Broad-st. site, for R.D.C. S. Dep. £2 2s.

**Lewisham, S.E.** — Employment Exchange. — For H.M.O.W. Contracts Branch, King Charles-st., S.W.1. Dep. £1 1s.

**Normanton.**—Painting.—Exterior of 83 houses on Hanson House estate, Normanton, and 2 park lodges, for U.D.C. S.

**Peterborough.**—Exit.—Exit, complete with iron stairway from east dormitory, at institution, for Soke of Peterborough C.C. W. Auton, clerk to Guardian Committee, Boardroom, Broadway, Peterborough.

**Quarry Bank.**—Houses.—44 on Saltwells-wood site, off Coppice-lane, for U.D.C. A. Homfray, clerk. Dep. £2 2s.

**Rayleigh, Essex.**—Public Conveniences.—For U.D.C. Clerk, Council Offices. Dep. £2 2s.

**Stonehaven.**—Houses.—8, for T.C. D. & J. R. M'Millan, architects, 105, Crown-st., Aberdeen.

**Sunbury-on-Thames.**—Painting.—Railings, gates, robing-room and notice-boards at cemetery, Greenway, for U.D.C. H. F. Coales, S.

**Sunderland.** — Painting. — Of Hendon branch library, for T.C. B.E.

**Sunderland.** — Painting. — Of Monkwearmouth branch library, for T.C. B.E.

**Worksop.**—Houses.—50, on Lincoln-st. site, for T.C. S.

### APRIL 5.

**Aldershot.**—Houses.—In Whyte-av. and Guildford-rd., for the T.C. Town Clerk, Municipal-bldgs. Dep. 10s.

**Glasgow.**—Jobbing Works and Materials.—For Housing Department. Director of Housing, 20, Trongate, C.1.

**Glasgow.**—Works.—Jobbing work and materials, for City Improvements Dept. City Improvements Manager, Head Offices, 6/8, Edmund-st.

**Leicester**—Employment Exchange.—For H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

**Malmesbury.**—Houses.—24 non-parlour type, for R.D.C. John C. Wade, S. and E. Dep. £3 3s.

### APRIL 6.

**Malling.**—Housing.—Nine pairs of cottages at Church-rd., Offham, and ten pairs of cottages at Four Wents, Ryarsh, for R.D.C. S. L. Bundy, Building Surveyor, High-st., West Malling. Dep. £1 1s.

**Warrington.**—Extensions.—(1) Extensions to offices, and (2) structural alterations to central drapery departments (separate contracts), for Co-operative Wholesale Society, Ltd., Manchester. Warrington Co-operative Society, Ltd., 15, Cairo-st., Warrington.

**Wembley.**—Cottages.—54 non-parlour cottages at Perivale-lane, Alperton, for U.D.C. C. R. W. Chapman, E. and S. Dep. £5 5s.

### APRIL 7.

**Barking.**—Houses.—Upney Farm Estate. C. J. Dawson, F.R.I.B.A., Clock House-chams.

**Blyth, Nornay.**—Demolition.—Also re-erection of retaining walls and other subsidiary works at "Shincliffe House," Blyth Nornay. J. Cracroft Haller, C.S., Shire Hall, Nottingham.

**Higham.**—Houses.—Two houses at Lower-rd., Higham, and four houses at Green Farm-lane, Shorne, for R.D.C. D. P. Terry, acting surveyor. Dep. £2 2s.

**Southgate.**—Fencing.—Providing and erecting about 670 yds. of oak fencing, with entrance gates, to enclose two portions of land off Broad-walk, for U.D.C. R. Phillips, S.

**Ware.**—Repairs.—And decorations at hospital at Gallows Hill, for Hertford and Ware Joint Hospital Board. G. H. Gisby, clerk, 8, West-st.

### APRIL 8.

**Ashbourne.**—Houses.—Six non-parlour type, Middleton-by-Wirksworth, and four non-parlour type, parish of Hartington Nether Quarter, for R.D.C. A. H. Thomas, clerk. Dep. £2 2s.

**Barnstaple.**—Houses.—Six houses at Bishopstawton, and two houses at Stoneyland and two houses at Eastacombe, for R.D.C. H. Hargreaves, building surveyor, The Red House, Castle-st. Dep. £1 1s. each.

**Birkenhead.**—New Library.—For the Corporation. Town Clerk, Town Hall. Dep. £3 3s.

**Birmingham.**—Alterations.—To sanitary block, female 1 and female 8 wards at Winson Green division, Lodge-rd., for T.C. D. E. Turner, L.R.I.B.A., etc., the Committee's Chief Officer of Works, Hollymoor Mental Hospital, Northfield. Dep. £3 3s.

**Normanton.**—Hall.—Parish hall at Altofts. C. H. Marriott, Son & Shaw, architects, Church-st.-chambers, Dewsbury.

**Tadcaster.**—Houses.—10 houses at Barwick-in-Elmet and construction of sewers, for R.D.C. H. W. Boardman, E. Dep. £2 2s.

**Thrybergh.**—Installation.—Alterations and extensions to heating installation at Council school, for West Riding E.C. A. Adcock, Divisional Clerk, Education Office, Godstone-rd., Rotherham.

### APRIL 9.

**Christchurch.**—Decoration.—Exterior decoration, general repairs, etc., at Christchurch Council school and headmaster's house, for Isle of Ely E.C. School Architect, County Hall, March.

**Downpatrick.**—Repairs.—To cottages in Ballynahinch area, also painting at cottages in Castlewellan area, for R.D.C. R. J. Carr, clerk.

**Leicestershire.**—Redecorations.—To schools, for E.C. W. A. Brockington, Director of Education, County Education Office, Greyes Friars, Leicester.

**Mallow.**—Hospital.—At Mill-st., on site of former workhouse, for North Cork Board of Public Assistance. M. Regan, secretary. Dep. £15.

**Outwood.**—Papering.—Papering, varnishing, etc., and complete decoration of boardroom and entrance hall at Cemetery House, Outwood, for Outwood Burial Board. H. Wainwright, clerk, "Hillholme," 133 Leeds-rd., Newton Hill, Wakefield.

**Reigate.**—Demolition.—Of old Mansion House, Reigate Lodge, for T.C. B.S. Dep. £1 1s.

**Royston.**—Houses.—14 bungalow type houses for aged persons on land situate off Station-rd., Royston, together with roads and sewers, for U.D.C. Dyson, Cawthorne & Coles, architects, 25, Regent-st., Barnsley.

### APRIL 11.

**Beeston.**—Houses.—65 non-parlour, on Dennis-av., Central-av., and Boundary-rd., etc., for U.D.C. E. A. Bush, S. Dep. £2 2s.

**Crayford.**—Houses.—28 at Slade Green and 16 on its Watling-st. site, for U.D.C. F. Leary, E. and S. Dep. £3 3s.

**Daventry.**—Houses.—Three pairs of non-parlour-type at Drayton, for T.C. J. B. Williams, architect, The Moot Hall. Dep. £1.

**Stanley.**—Houses.—100 on South Stanley housing estate, for U.D.C. A. Routledge, S. Dep. £2 2s.

**Tunbridge Wells.**—Houses.—110 non-parlour type on Rusthall Grange estate, for T.C. Hugh P. Bishop, B.E. and S., 1 & 2, Calverley-mount. Dep. £5 5s.

**Warrington.**—Wiring.—Bewsey Council school, for E.C. J. Moore Murray, M.Sc., Director, Sankey-st.

### APRIL 12.

**Heswall (Cheshire).**—Extension.—To Telephone Exchange, for H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

**Nottingham.**—Building.—Sub-station in Valley-rd., for T.C. T. Wallis Gordon, City E. and S. Dep. £2

**South Shields.**—Houses.—44 blocks of houses containing 198 flats, and electric sub-station on site in Farnham-rd., Tyne Dock, for C.B. B.E. Dep. £2 2s.

### APRIL 13.

**Kirkburton.**—Painting.—External painting of several buildings at Storthes Hall Mental Hospital, for West Riding Mental Hospitals Board. W. E. H. Burton, Assoc.M.Inst.C.E., architect and engineer, West Riding Mental Hospitals Board Offices, Wakefield.

**Tunbridge Wells.**—Post Office Garage, for H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s

### APRIL 14.

**Brighton.**—Building.—Public conveniences for men and women adjoining "White Horse Hotel," Rottingdean, for T.C. B.E. and S. Dep. £2 2s.

**Durham.**—Painting.—Outside painting of county police stations and houses, for C.C. William J. Merrett, C.S., 43, Old Elvet, Durham.

**Essex.**—Extensions.—To Severalls mental hospital, Colchester, for Essex and Colchester Mental Hospitals of C.C. Jno. Stuart, F.R.I.B.A., County Architect, County Hall, Chelmsford. Dep. £3 3s.

**Liverpool.**—Glazing.—At elementary schools, for T.C. Land Steward and Surveyor.

### APRIL 15.

**Waltham Abbey.**—Decorations.—Internal decoration of 12-bed scarlet fever block at Board's Isolation Hospital, Honey-lane, Waltham Abbey, for Waltham Joint Hospital Board. T. J. Tee, clerk, Buckhurst Hill

### APRIL 16.

**Banbury.**—Houses.—160 in Warwick-rd., for T.C. B.S. Dep. £5 5s.

**Cudworth.**—Houses.—20 non-parlour type on land situate off St. John's-rd., for U.D.C. S.

### APRIL 18.

**Hucknall.**—Houses.—48 non-parlour type on Brookside estate, and 12 small houses for aged persons on Palmer-av. estate, Hucknall, for U.D.C. H. M. Aitchison, Architect and Surveyor. Dep. £2 2s.

**Near Leeds.**—Painting.—External painting of several buildings at Menston Mental Hospital, near Leeds, for West Riding Mental Hospitals Board. W. E. H. Burton, architect and engineer, West Riding Mental Hospitals Board Offices, Wakefield.

### APRIL 20.

**Brighton.**—Houses.—On the Whitehawk site, for the Corporation. Town Clerk, Town Hall. Dep. £2 2s.

**Hemel Hempstead.**—Houses.—In Runham-rd., for the Corporation. Town Clerk, Town Hall. Dep. £5.

**Ilford.**—Extensions.—To Ilford telephone exchange, for H.M.O.W. Contracts Branch, King Charles-st., S.W.1. Dep. £1 1s.

**Manchester.**—Houses.—On the Wythenshawe estate. Housing Director, Town Hall. Dep. £2 (to City Treasurer).

**Pontefract.**—Adaptation.—Of premises as public elementary school, for T.C. Pennington, Hustler & Taylor, architects, Ropergate.

### APRIL 22.

**Galway.**—Reconstruction.—Of Prospect-hill buildings and conversion of same into County Offices, etc., for C.C. M. J. Kennedy, C.S. Dep. £5 5s.

### APRIL 23.

**Lancashire.**—Fencing.—Creosoted tember fencing and alternatives on boundary line and embankments of new Liverpool-East Lancashire-rd., together with field gates, wicket gates, stiles, and all other works appertaining thereto, for C.C. H. Swire, resident engineer, Wellesley House, Newton-le-Willows.

### APRIL 26.

***Romsey.**—Poor Law Vagrancy Ward. Clerk, The Castle, Winchester. Dep. £1 1s. (payable to Hampshire C.C.).

### NO DATE.

**Belfast.**—Reconstruction.—Of Metropole Hotel and adjoining property, at corner of York-st. and Donegall-st. T. D. Purdy, architect, 10, Donegall-sq. East, Belfast.

**Dornoch.**—Bungalow.—At Bishopfield, for Mrs. Wyborn. Horne & Murray, architects, Golspie.

**Finchley.**—Fencing.—Chain link fencing at Gun Station site, for U.D.C. Percival T. Harrison, E. and S., 9, The Hawthorns, Regent's Park-rd., N.3

**Lebotwood.**—Alterations.—Also additions to farm house and buildings at Walk Mills, County Land Agent, 5, Belmont, Shrewsbury.

**Lilleshall.**—Additions.—Alterations and additions to two cottages at Hincks Farm, for Salop C.C. County Land Agent, 5, Belmont, Shrewsbury.

**Newcastle (Staffs).**—House.—Water softener house at London-rd. institution, for Stoke-on-Trent P.A.C. E. B. Sharpley, T.C., Stoke-on-Trent. Dep £1

**Sandon.**—Bungalow.—Bungalow in parish of Barling, and small holder's house in parish of Sandon, for Essex C.C. Chas. Lock, F.S.I., County Land Agent, Chelmsford.

**Whitchurch.**—Offices.—Classroom and out offices at school, for Somerset C.C. A. J. Toomer, County Architect, Park-st., Taunton.

## MATERIALS, etc.

### APRIL 4.

**Dun Laoghaire.**—Highway Materials.—For Corporation. P. J. Hermon, Borough Engineer. Dep. £1 1s

**Edinburgh.**—Building Materials, etc.—For Gas Dept. Harry H. Gracie, engineer and manager, 15, Calton-hill, Edinburgh.

### APRIL 6.

**Hayward's Heath.**—Pipes.—233 tons of cast-iron socket and spigot pipes of 5-inch dia., and specials of 5-inch, 4-inch and 3-inch dia., for Mid-Sussex Joint Water Board. F. Martin, engineer, Boltro-rd. Dep. £2 2s.

**Hyde.**—Road Materials.—For T.C. B.S.

**Maldon.**—Road Materials.—B.E.

**Radcliffe.**—Road Materials.—For U.D.C. E. and S.

### APRIL 7.

**Belfast.**—Wood Block Flooring, etc.—For Down County Regional E.C. Castor J. Love, architect, 5, Wellington-place, Belfast.

**Elham.**—Granite, etc.—For R.D.C. A. E. Price, Highways Surveyor, Lyminge, Folkestone.

**London.** — Building Materials. — For G.W.R. F. R. E. Davis, Secretary, Paddington Station, W.2.

### APRIL 9.

**Bexhill.**—Tarmacadam, etc.—For T.C. B.S.

### APRIL 11.

**Broadstairs and St. Peter's.** — Highway Materials.—For U.D.C. H. Hurd, S.

**Walmer.**—Granite, etc.—For U.D.C. S.

### APRIL 14.

**Ashford.**—Road Materials.—For U.D.C. S.

**Edinburgh.**—Pipes.—550 tons of cast-iron pipes, for T.C. J. & A. Leslie & Reid, Water Engineer, 29, Waterloo-place.

**Romford.**—Road Materials.—For U.D.C. F. G. Beaumont, E. and S., 110, Market-place.

### APRIL 15.

**Manchester.**—Slag.—3,000 tons of clinker slag, for T.C. F. E. Warbreck Howell, Town Clerk, Rivers Department, Ship Canal House, King-st.

## ENGINEERING, IRON AND STEEL.

**APRIL 4.**

**Charlestown (Aberlour).**—Piping.—Reinforced concrete reservoir, and renewing old and laying new water piping, for T.C. John Wittet, architect, Elgin.

**APRIL 5.**

**Galloway.**—Construction.—Of contract No. 7, Clatteringshaws dam, in connection with the Galloway power works, for Water Power Co. Sir Alexander Gibb & Partners, Queen Anne's Lodge, Westminster, London, S.W.1. Dep. £10 10s.

**APRIL 6.**

**Glamorgan.**—Works.—Caerphilly—Bedwas county rd.; groyne and river training works at Bedwas Bridge, for C.C. E. C. Pole, C.S., Cardiff.

**APRIL 7.**

**Ayr.**—Chamber.—Intake chamber, screening chamber and house, compensation chamber and house, and mass concrete weir and other relative work at Loch Recawr, Straiton, for T.C. Warren & Stuart, C.C.E., 94, Hope-st., Glasgow.

**APRIL 9.**

**Lancashire.**—Bridge Works.—Reconstruction of Haydock-pk. (county) bridge, Wigan and Warrington rd., A 49; strengthening of Inskip bridge, Higham-rd., Wharles, District-rd.; repairs to Voss Dam bridge, Lydiate, District-rd.; construction of footbridge over River Medlock, near Woodhouses, for C.C. County Surveyor and Bridgemaster, County Offices, Preston.

**Nottinghamshire.**—Rebuilding.—Demolition and rebuilding of approximately 360 lin. yds. of brick and stone walling at Sutton Bonington, for C.C. J. Cracroft Haller, C.S., Shire Hall, Nottingham.

**APRIL 11.**

**Stoke-on-Trent.**—Culvert.—Reinforced concrete culvert, adjacent Longport Station, including access manholes, etc.; also mass concrete channel and mass concrete and steel bridge, carrying an accommodation road over same, together with other incidental work for Fowlea Brook (northern section) sewage, for T.C. City Sewage Engineer, Leek-rd. Dep. £3 3s.

**APRIL 12.**

**Tanderagee.** — Waterworks. — Waterworks, for U.D.C. R. Ferguson & S. M'Ilveen, consulting engineers, 36, Scottish Provident-bldgs., Belfast.

**APRIL 14.**

**Cairo.**—Reservoir.—Construction of a third reservoir at Beni Sonef Waterworks, for Ministry of Interior and Local Commissions. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. No. G.X. 11275.)

**Hilperton.**—Reservoir.—Service reservoir on site adjacent to present reservoir, for Trowbridge, Melksham and District Water Board. Board's Engineer, Silver-st., Trowbridge.

**APRIL 16.**

**West Riding.**—Reconstruction.—Rebuilding spandril and parapet walls of Bentham Mill Bridge, High Bentham; reconstruction of Baffe Bridge, Wetherby; reconstruction (span 3 ft.) of Holbecks Bridge, Great Ouseburn; reconstruction (span 6 ft.) of Howe Bridge, Great Ouseburn; reconstruction (span 6 ft.) of Keswick Beck Bridge, Wetherby, for C.C. West Riding Surveyor, County Hall, Wakefield. Dep. £1 each.

**APRIL 19.**

**Tottenham.**—Culvert.—Culverting in reinforced concrete 50 lin. yds. of Moselle watercourse in Lordship recreation ground, by Walpole-rd., for U.D.C. Capt. H. F. Wilkinson, E. Dep. £1.

**APRIL 21.**

**Prestwich.**—Drainage.—Reconstruction of sewage and drainage system at Mental Hospital, for Lanshire Mental Hospitals Board. Cruickshank & Seward, FF.R.I.B.A., Crown-bldgs., 18, Booth-st., Manchester. Dep. £3 3s.

**APRIL 25.**

**South Africa.**—Steelwork.—Structural steelwork for cargo shed at East London, for South African Railways and Harbours Administration. Dept. of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. G.X. 11242.)

**APRIL 26.**

**Dublin.**—Bridge.—Twin-leaf rolling lift bridge over entrance to George's Dock, and removal of existing swing bridge, for Port and Docks Board. E. H. Bailey, secretary, Port and Docks Office Dep. £5 5s.

## ROAD, SEWERAGE, AND WATER WORKS.

**APRIL 4.**

**Acton.**—Roads.—Roads and sewers in connection with proposed flats in Wales Farm-rd., for T.C W. G. Cross, B.E. Dep. £2 2s.

**Bognor Regis.**—Surfacing.—Surface dressing, etc., of about 80,000 sq. yds. of carriageways, for U.D.C. J. Draper, B.E.

**Bury St. Edmund's.**—Paving.—Playground of Feoffment boys' school, for E.C. Naish & Mitchell, architects, Hatter-st.

**Hornchurch.**—Making-up.—Vicarage-rd., Dorian-rd Candover-rd., for U.D.C. F. Alderson, S.

**Leanhead.**—Footpath.—Laying of about 400 sq. yds. of carriageway and of about 270 sq. yds. of footpaths in Fowler-sq., for T.C. Carfrae & Morrison, C.E., 4, Hill-st., Edinburgh.

**Slough.** — Making-up. — Of Richmond-crescent, Woodland-av., Leeds-rd. West (part of), Carlisle-rd. and Lake-av., for U.D.C. A. Bromly, E.

**APRIL 5.**

**Lanark.**—Roads.—Road construction work, etc., at Tannochside housing scheme, for C.C. P. C. Smith, County Housing and Town Planning Department, 13, Clydesdale-st., Hamilton

**Northfleet.**—Drains.—House drains in connection with 80 houses now in course of erection at Waterdales, Wombwell Hall-pk., for U.D.C. J. A. Mitchell, S.

**Southborough.**—Main.—Provision and laying of about 212 yds. of 3 in. cast-iron water main with connections to existing main, new valves, hydrants, etc., for U.D.C. W. N. Wood, clerk.

**APRIL 6.**

**Alperton.**—Sewerage Work.—At Perivale-lane, for the Wembley U.D.C. Engineer and Surveyor, Council Offices, Wembley. Dep. £2 2s.

**Greenock.**—Widening.—Of main street from Cartsburn-st. for distance of about 670 lin. yds. eastwards, for Corporation. Dep. £5.

**Hove.** — Making-up. — Mornington-crescent and Rothbury-rd., for T.C. T. R. Humble, B.S.

**Swansea.**—Paving.—Belle Vue-rd., West Cross; back street at rear of Glanbrydan-av.; back street at rear of Pantygwydr-rd.; road betwen Nos. 66 and 68, Glanbrydan-av.; back street at rear of Knoll-av., extending from Beechwood-rd. to Glanbrydan-av.; back street at east side of Wern-ter., Port Tennant, for C.B. J. Richard Heath, E. and S.

**Welwyn Garden City.**—Roads.—Spraying with a hot bituminous dressing about 127,000 super. yds. of road surface, for U.D.C. Capt. W. E. James, E. and S.

**West Ham.**—Making-up—Of Alnwick-rd. from Baxter-rd. to east side of 8, Chant-ter., for C.B. B.S

**APRIL 7.**

**Barking.**—Road.—For East Ham and Barking by-pass, experimental section, for M.T. Chief Engineer, Roads Department, Ministry of Transport, 7, Whitehall-gdns., S.W.1. Dep. £25.

**Leeds.**—Paving.—Kerbing, flagging, tar paving footpaths and carriageways in Fearnville-av., Wensley-rd., Marsden-av., Ivy-av., Argie-av., Dawlish-st., and kerbing and tar paving footpaths in streets on Hawksworth Wood housing estate, and kerbing, flagging, paving, concreting, etc., on portions of the Highway in various streets, for T.C. E. W. Cockerlyne, Highways Engineer, 155, Kirkstall-rd., Leeds. Dep. £1 1s.

**London.**—Paving.—Forming and paving of portion of Begbie-rd., for Greenwich B.C. B.E. and S.

**APRIL 9.**

**Romford.**—Dressing.—Surface dressing of approximately 360,000 sq. yds. of main and district roads, for U.D.C. F. G. Beaumont, E. and S., 110, Market-place.

**Weymouth and Melcombe Regis.**—Making-up.—Wardcliffe-rd. (part of), Queen's-rd. and Belle Vue-rd. for T.C. R. W. Vine, B.E. and S

**Wimbledon.**—Making-up.—Of Merton Hall-gardens, for T.C. B.E. and S. Dep. £2 2s.

**APRIL 11.**

**Stockport.**—Pipes.—Laying and jointing of cast-iron pipes, 30 in. and 12 in. in dia., between the Goyt Valley, Whaley Bridge, and Higher Disley, and between Disley and High-lane, for T.C. G. H. Hill & Sons (Manchester), 40, Kennedy-st., Manchester. Dep £5 5s.

**APRIL 12.**

**Coulsdon and Purley.**—Making-up.—Of Mossleard., Kenley, for U.D.C. G. A. Ballard, S. Dep. £1 1s.

**Grays.**—Making-up.—Laying about 274 yds. of 6-in. surface water drain, together with manholes and stoneware gullies, and making-up St. George's-av. and Langthorne-cres., for U.D.C. H. S. Goodall, E. and S., 57, High-st. Dep. £2 2s.

**APRIL 14.**

**East Finchley.**—Repairs.—Of cemetery roads at East Finchley, for St. Pancras B.C. A. Powell Coke, T.C.

**Guildford.**—Sewer.—900 lin. yds. of 45-in. dia. and 442 lin. yds. of 21-in. precast concrete tube sewer in tunnel, for T.C. J. W. Hipwood, B.S. Dep. £5 5s.

**London.**—Resurfacing.—Old Brompton-rd. (Sussex-place); Thurloe-place (part); Acklam-rd. (throughout); Calverley-st. (throughout); Testerton-st. (part); Collingham-rd. (throughout); and Richmond-rd (part), for Kensington B.C. B.E. and S.

**APRIL 15.**

**Norden.**—Making-up.—Woodgate-av., Oxford-av., passage at rear of 48-82, Bury-rd., for U.D.C. Percy Whittaker, S.

**APRIL 18.**

**Formby.**—Roads.—Road and footpaths and gully connections in Davenham-rd., for U.D.C. E. Kendrick Gollan, E. and S.

**APRIL 21.**

**Ashford.**—Drainage.—Laying of iron sewers, etc., in Southern Rly. works, for U.D.C. A. F. Webster, S., 5, North-st. Dep. £4 4s.

**NO DATE.**

**Vange.**—Path.—Laying a concrete path about 850 ft. in length, for P.C. A. J. Moss, clerk, Kestall House, Vange.

**Wakefield.**—Sewers.—For sewers and road-making and house draining 56 houses, Belle Vue. C. F. Napper, 13, Albert-st., Harrogate.

## Public Appointments

**APRIL 15.**

***Flint.**—Clerk of Works. T.C., Town Hall.

**APRIL 16.**

**Birmingham.**—Clerk of Works, to supervise erection of head offices and central bank. General Manager, Head Offices, 6-8, Edmund-st.

**APRIL 18.**

***Gloucester.**—Clerk of Works. Medical Superintendent, County Mental Hospital.

# PROPOSED NEW BUILDINGS AND OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B. of E. for Board of Education; M.W.B. for Metropolitan Water Board; Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S.; Engineer, E.

**Aberdeen.**—Extensions to Royal Infirmary. J. B. Nicol, architect, 367, Union-st.

**Aberdour.**—Housing scheme by Fifeshire C.C. A. Scobie & Sons, architects, Douglas-st., Dunfermline.

**Abergavenny.**—R.D.C. to build 8 houses.

**Ainwick.**—U.D.C. to clear allotments over wide area on Clayport Bank and erect 50 working-class dwellings.

**Annfield Plain (Durham).**—U.D.C. approved plans and estimates for 82 houses on West Kye estate.

**Baldock.**—U.D.C. to consider scheme for provision of houses for aged poor.

**Basingstoke.**—T.C. recommend that 10 acres of land be acquired at South Ham for houses and that Housing Committee be instructed to proceed with preparation of plans, etc., and apply to M.H. for sanction to loan.

**Bedford.**—T.C. approved: Corporation, 22 houses, London-rd. housing scheme.

**Bedlington (Northumberland).**—U.D.C. considering proposal to erect sunray clinic. J. W. Pooley, S.

**Bexhill.**—T.C. approved:—3 pairs of semi-detached houses, Southlands-av., E. Bunce, for G. & C. Draper.

**Billingham-on-Tees.**—Northern Baptist Association seeking site for church and school.—B. of E. approved plans by Durham County E.C. for additions to Council school. F. Willey, F.R.I.B.A., 34, Old Elvet, Durham.

**Birmingham.**—Holt Brewery Co., Ltd., Holt-st., Aston, propose licensed premises at corner of High-st. and Carrs-lane. Plans by breweries' survey department.

**Bishop's Stortford.**—U.D.C. approved: Showrooms, offices and stores, North-st., for Bishop's Stortford, Harlow and Epping Gas and Electricity Co.

**Blackpool.**—J. B. Singleton, architect, Borough Chambers, 7, Cedar-st., has prepared plans for residential hotel on Promenade and Beach-rd., Cleveleys, but this work, we understand, will not be proceeded with for about a year.

**Bolton.**—Additions to "Lever Arms" public-house, Nelson-sq. Plans at architects' department of Magee, Marshall & Co., Ltd., Crown Brewery, Bolton.

**Boston.**—Witham Catchment Board propose reconstruction of Grand Sluice bridge. Engineer, F. H. Tomes.

**Bridlington.**—Plans in preparation for open-air dance floor to be built over boating lake on Spa.

**Brighton.**—Licensed premises to be erected in Alfreston-rd., Seaford. Plans by architect to Rock Brewery Co., Ltd., 61, St. James-st.

**Bromley.**—R.D.C. approved: Additions, rear of branch of South Suburban Co-operative Society, High-st.; 70 houses in Lancing-rd., S. Knox; 30 pairs of houses, Felsted-rd., Orpington Modern Homes, Ltd.

**Bungay.**—U.D.C. are having sketch plans prepared for more houses.

**Burnley.**—Governors of Grammar School propose extensions at £2,000. Plans by the Borough Surveyor.

**Carrington.**—P.C. propose parish hall at £2,000.

**Chapeltown (Leeds).**—A. Nicholson proposes to build 112 houses on Newton Green Hall estate.

**Chard.**—R.D.C. passed plans for club-house on new golf course at Windwhistle.

**Chester.**—T.C. recommend site of bowling green bank, Brook-st., be cleared for purpose of making motor bus station. City S. to carry out work at £165.—Council recommend application to M.H. for sanction to borrowing moneys for reconstruction and widening of Saughall-rd. canal bridge.—Council recommend rewiring of electrical installation at isolation hospital at £126.

**Chesterfield.**—T.C. to acquire site at Stone Hay for Council school.—R.D.C. propose 50 houses at Staveley.

**Coulsdon and Purley.**—U.D.C. approved: H. N. Cude, rebuilding and addition after fire, 251, Godstone-rd., Kenley.

**Coventry.**—T.C. approved:—21 houses, Billing-rd., Freestone & Blockley; 8 houses, Arbury-av., B. G. Osborne; 8 houses, Lilac-av., J. H. Bee; swimming bath and dressing room, Coventry Preparatory School, Kenilworth-rd., Rev. K. Swallow; 6 houses and 6 private garages, new street off Beechwood-av., T. Bates & Son; 12 houses, Abbey-rd., J. G. Gray; alterations to premises, corner of Gulson-rd.

*See also List of Contracts, Competitions, etc.

and Vecqueray-st., D. Gardner; extensions to stores building, Canley-rd., Standard Motor Co., Ltd.; 100 houses, Stoke Aldermoor estate, Corporation; 12 houses, new street off Watery-lane, Keresley, Hadfield & Ward; assembly hall and cafe, London-rd., Willenhall, The Chase Hotel, Ltd.; 92 houses, Bedworth Heath estate, Goodyers End-lane and Heath-rd., Bedworth, Bedworth U.D.C.; 21 houses, Billing-rd., Freestone & Blockley; 13 houses, Lavender-av., W. A. Player & Son; 12 houses, Abbey-rd., J. G. Gray; 8 houses, Lilac-av., J. Bee; 8 houses, Coleridge-rd., Wyken House estate, A. Friswell.

**Criggiestone.**—Catholic Authorities propose mission church.

**Crofton (Yorks).**—Catholic Authorities acquired site for church.

**Dalkeith.**—Corporation to erect new housing scheme of 136 houses. J. B. McDougall, Burgh Architect.

**Darlington.**—Alterations and additions proposed to rolling mills.

**Dewsbury.**—Branch dairy premises adjoining warehouse in Wellington-rd. for Dewsbury Pioneers' Industrial Society, Ltd., Dewsbury. Plans by architect to society.

**Dronfield.**—U.D.C. propose mortuary

**Durham.**—County E.C. received sanction from B. of E. to alterations to Shildon Council school and Timothy Hackworth Council school, and also additions to Tow Law Council school. Plans by F. Willey, F.R.I.B.A., County Architect, 34, Old Elvet, Durham.—E.C. secured sites at Pelton, Newfield and Houghton-le-Spring for council schools. F. Willey, 34, Old Elvet, Durham, is committee's architect.—B. of E. to be asked to approve sketch plans for additions to Delves-lane Council school and the Blackhall Colliery Council school.

**Ealing.**—T.C. approved: Kingfield-rd., 8 houses and 1 garage; Brunswick-rd., 8 houses; Mulgrave-rd., 4 houses; Lynwood-rd., 16 houses and 1 garage—for the London & Provincial Building Co., Ltd., Bilton House, 113, Park-st., W.1; South Ealing-rd., 4 shops, for J. Brown, 81, Staines-rd., Hounslow; Ribblesdale-av., 4 houses; Ealing-rd., Northolt, 4 houses—for J. & J. H. Boothman (1930), Ltd., Briarhill Estate, Northolt; New Broadway, Uxbridge-rd., 5 shops and flats, for Central Commercial Properties (architect, North, Robin & Wilsdon, Townsend House, Greycoat-place, S.W.1); Windmill-rd., 12 shops and flats, for Wigglesworth (F. Richards, Ltd., 28, London-lane, Mare-st., Hackney, E.8); North Circular-rd., 17 shops and flats, for R. Lancaster & Sons, Ltd., (architect, G. L. Russell, 16, Basinghall-st., E.C.2); Perivale-lane, 12 houses; Bilton-rd., 19 houses; Brooklands-drive, 32 houses; Perimeade-rd., 34 houses; Fairfield-drive, 20 houses—for W. Smirk & Sons (architect, G. L. Russell, 16, Basinghall-st., E.C.2); Greenford-rd. and Ruislip-rd., 12 shops and flats, for West Middlesex Investment Co. (architect, G. Gould, 3, Park-way, Ruislip-rd., Greenford); Tavistock-av., 16 houses, for E. B. Burge, 83, Ealing Park-gardens, Ealing, W.5; Clauson-av., 12 houses, for Guest Building Co., West Town Estate, Bath-rd., Taplow; Greenford-rd. ("The Bridge Hotel"), licensed premises, for Young & Co.'s Brewery, Ltd. (architects, Clemence & Co., St. Mary's House, 59, Quarry-st., Guildford); The Broadway, Ruislip-rd., shops, for Sainsbury, Ltd. (architects, Hamblin, Fox & Bailey, 73, Queen Victoria-st., E.C.4); Bideford-av., factory, for Wego Condenser Co., Ltd. (Percy Bilton (Inc.), Ltd., Bilton House, 113, Park-st., W.1); New Broadway, Uxbridge-rd., additions, 35, for Central Commercial Properties (architects, North, Robin & Wilsdon, Townsend House, Greycoat-place, S.W.1); Perivale-lane, additions to Priory Works, for Clements, Newling & Co., Ltd. (architect, H. J. Manchip, 49, Windermere-rd., Muswell Hill, N.10); Western-av., garage at Hoover's factory, for Hoover, Ltd. (architect, Wallis, Gilbert & Partners, 29, Roland-gardens, S.W.7); Hastings-rd., flats and garages, for F. W. Showers, Great Western Railway, Surveyors' & Estate Office, 153, Westbourne-terrace, Paddington, W.2.

**Earlestown.**—Earlestown Conservative Club (sec., G. H. Appleton) proposing extensions to billiards room.

**Easington-with-Thorpe (Durham).**—P.C. to erect public convenience at £3,000.

**Edinburgh.**—Reconstruction and additions at West Maitland-st. and Palmerston-place, for Bank of Scotland. Reid & Forbes, architects, 17, Great Stuart-st., Edinburgh.

**Elstree.**—T. H. B. Scott, F.R.I.B.A., 11, Finsbury-sq., London, E.C.2, architect for Catholic Church for St. Teresa of the Child Jesus on site known as "The Grange."

**Eston-on-Tees.**—U.D.C. to build 148 houses by direct labour. C. W. Cockersoll, S.

**Falkland.**—Corporation to erect new housing scheme of 54 houses at Lomond-crescent. A. D. Hayton, architect, Commercial-st., Leven.

**Felling-on-Tyne.**—E.C. invites tenders for two classrooms and alterations to assembly hall at High Felling Council school. Plans by C. P. Sherwin, 1, Kingsway, Tynemouth.

**Fifeshire.**—C.C. to erect houses at following villages, Cupar-Muir, Springfield, Dinashall, and Pitlossie. Walker & Pryde, architects, Church-sq., St. Andrews.

**Fleetwood.**—Corporation propose 100 houses on Flakefleet estate.

**Fraserburgh.**—Session of South Church negotiating with T.C. for lease or purchase of ground on links for building new hall.

**Gateshead-on-Tyne.**—Quantities being taken out and tenders invited for Methodist Church. Plans by S. J. Stephenson, Saville-place, Newcastle.—B.E. prepared sketch plans for proposed extensions to mental hospital at Stannington, to cost £120,000.

**Gillingham.**—E. Todd, architect, 308, High-st., Rochester, prepared plans for alterations and improvements to premises in Balmoral-rd., Gillingham, for Rochester and Chatham Savings Bank, High-st., Rochester.

**Glasgow.**—Plans passed:—garage at Spencer-lane, Temple, R. Conray-Robertson, architect, 51, Peel-st., Partick, Glasgow; factory, offices and other accommodation at Saracen-st. and Killcarn-st., Possilpark, for Manufacturing Chemists, W. B. Whittie, architect, 226, St. Vincent-st., Glasgow; reconstruction, etc., at Clanston-st., W. Ross, architect, 84, Preston-st., Govanhill, Glasgow.

**Gosberton.**—Members of Clough Chapel propose building, at £2,000.

**Grassmoor.**—Park Tennis Club propose tennis pavilion in Barnes-pk.

**Hartley Wintney.**—R.D.C. approved: Alterations to "Coach and Horses Inn," Rotherwick, J. May & Co., Ltd.; alterations to "Fox and Hounds Inn," Crookham, Courage & Co., Ltd.; alterations and additions to "Black Horse Inn," Crookham, Courage & Co.; alterations and additions to "Old White Hart Inn," Hook, Dymore Brown & Co.; alterations to "Golden Pot," Eversley, Dymore Brown & Co.

**Herne Bay.**—U.D.C. approved:—flats and business premises over existing shops, Bank-st. and High-st. corner, for F. H. W. Wilbee, per H. Messenger, A.R.I.B.A.

**Holbeck.**—Plans prepared for additions to nurses' home for Holbeck district in Domestic-st. Tenders invited. Architects, Kitson, Parish, Ledgard & Pyman.

**Horden.**—Easington R.D.C. to be asked to provide mortuary.

**Huddersfield.**—B.E. to prepare plans for 148 houses on Almondbury, Wormald-st. and St. Andrew's-rd. sites. Tenders invited.

**Hursley.**—R.D.C. approved: 11 bungalows, Park-rd., Allbrook, A. Rix.

**Hyde.**—Council approved: Store building, Muslin-st., British Leather Cloth Co.; 11 houses, Tom Shepley-st., C. H. Pike; 5 houses, Richmond-st., Crompton Bros.

**Inverkeithing.**—Fireshire C.C. to erect new housing scheme. A. Scobbie & Sons, architects, Douglas-st., Dunfermline.

**Isle of Wight.**—Alterations and improvements to be made at "Buddle Inn" public-house, at Niton, for W. B. M. Langton & Co., Ltd., brewers, of High-st., Cowes.

**Jarrow-on-Tyne.**—T.C. declared Old Church area as slum area, which they propose to clear. J. S. Weir, B.S.

**Kingston-on-Thames.**—B.S. to prepare plans for lavatory accommodation in Crown-passage.—Plans passed:—Ceres-rd., 6 shops with living accommodation over, G. Whittaker; Penrhyn-rd., 10 houses, J. Brewerton.

**Kiveton Park.**—R.D.C. propose 30 houses at South Anston. F. J. Thackray, S.

**Lancaster.**—Board of Management of Royal Lancaster Infirmary proposing further extensions to institution, at £35,000. Architects, Austin & Paley, A.R.I.B.A., 34, Castle-hill.

**Langley Moor (Durham).**—Local branch of British Legion proposes hall.

**Leeds.**—Managers of St. Patrick's Schools, New York-rd. (Very Rev. Dean P. Vermiere, P.P.), acquired site for senior girls' school. Plans by Empsall, Clarkson & Clarke, F.R.I.B.A., architects, Piece Hall-yd., Bradford.—Catholic Authorities propose church on Middleton housing estate.

**Leicester.**—Cowdell & Bryan, A.R.I.B.A., St. Martin's Chambers, 8, New-st., architects for Church of St. Anne's Western-park for Parochial Council (Vicar, Rev. M. H. Harland).

**Lewes.**—E. Philcox, architect, of Grey Tiles, Gundrada-rd., Lewes, prepared plans for alterations and improvements to business premises in High-st., for adaptation as hotel.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**Lichfield.**—Public-house in Sandford-st. Architects' Department, Lichfield Brewery Co., Ltd., St. John-st.

**Lindsey.**—C.C. approved scheme, for conversion of Horncastle Institution into children's home for P.A.C. Cost, £13,500.

**Linton (Northumberland).**—Welfare hall to be erected in connection with Linton Colliery.

**Liverpool.**—Mission and Chapel Committee, Wesleyan Methodist Society, propose improvements Brunswick Wesleyan Chapel in Moss-st. and erection of new Sunday schools. Brocklehurst & Co., F.R.I.B.A., architects, Martin's Bank-cham., 10, Norfolk-st., Manchester.

**London (Battersea).**—B.C. recommend two additional water closets on Sports Ground, Morden, at £124 18s.

**London (Deptford).**—B.C. approved: Pearsons, 189, Stanstead-rd., Forest Hill, S.E.23, 4 houses, 218, 220, 222 and 224, Drakefell-rd.

**London (Hammersmith).**—B.C. approved: Metropolitan Railway Company, Shepherd's Bush Market, erection of additional structure.

**London (Lambeth).**—B.C. to spend £18,000 on various highway improvements.—Plans passed: J. Kidd & Son, additions to Rosendale Hotel, Rosendale-rd.; H. F. Chambers, buildings upon site at corner of Orsett-st. and Newburn-st.

**London (St. Pancras).**—B.C. recommend lavatory accommodation at 59, 61 & 63, Pratt-st., at £218.

**Longbenton.**—U.D.C. decided to apply to M.H. for sanction to build further 36 houses at Burradon. Plans by S.—Site being sought by A. Davis, quantity surveyor, 6, Oxford-st., Newcastle, for proposed warehouse

**Macclesfield.**—T.C. propose public conveniences, Park-green, near technical school, at £1,000. E. Hamson, B.S.

**Manchester.**—Harry S. Fairhurst & Son, F.&A.R.I.B.A., 55, Brown-st., architects for Manchester Northern Hospital for Women and Children, to be erected on Alms Hill, Cheetham.—Plans approved by T.C.: electricity sub-station, Altrincham-st.; 6 houses, Hilbre-rd., Burnage, for C. H. Godfrey & Sons; theatre, Stockport-rd. and Hyde-rd Ardwick, for Association British Cinemas, Ltd., Haddon House, Regent-st., London; 6 houses on Stamford-rd. and Albert-place, Rusholme, for Thomas Barton, 34, Church-st., Ribchester; ice rink, cinema, sports stadium, etc., Wilmslow-rd. and Cromwell Range, Rusholme, for Rusholme Ice Rink Co., Ltd., 1, The Crescent, Rusholme.—Quantities to be sent out for school extensions for Managers of Our Lady of Grace, Fairfax-rd., Prestwich, for Rev. W. Browne, P.P. Plans by H. Greenhalgh, P.A.S.I., 15, Mawdesley-st., Bolton.

**Matlock.**—S. to prepare plans for reconstruction of town hall for U.D.C.

**Menston-in-Wharfedale.**—Trustees of Menston Wesleyan Church are proposing Sunday school adjoining chapel. Plans by W. J. Morley & Son, F.R.I.B.A., architects, 269, Swan-arcade, Bradford. Cost, £3,200.

**Middlesbrough.**—T.C. approved: 4 pairs semi-detached houses, Lansdowne-rd.; S. & E. Lowe; 4 houses, Ayresome Green-lane, J. Gilmore; 3 pairs semi-detached houses, Lavender-rd., Ormesby-rd., Whitehouse Estate, H. Palmer.

**Newcastle-on-Tyne.**—Tenders not yet been invited for new headquarters in Prudhoe-st. for Poor Children's Holiday Association. Cost, £20,000. Cackett, Burns, Dick & McKellar, architects, Ellison-place.—Plans been approved for alterations to premises of Moses & Co., Grainger-st., Marshall & Tweedy, architects, Mervyn House, Pilgrim-st. No contract been let.—Plans by J. N. Fatkin, 77, Westgate-rd., for motor garage and showrooms in Bath-lane, for Mr. Rosenbloom. No contracts let.—A. Baxter & Co., Ltd., Newcastle, to erect warehouse in Close.—Higginbottom & Co., Ltd., to erect addititional storey to premises in Pilgrim-st. Liddell & Bachelor, 12, Eldon-square, are architects.—City Council secured site from Catholic community for proposed public baths at Jesmond.—Town Improvement and Streets Committee approved plans for alterations to premises of Levine, Ltd. J. W. Taylor, St. John-st., is architect.—Merz & McLellan, Carliol House, prepared plans for sub-station near Erick-st., for Newcastle Electric Supply Co., Ltd

**Northants.**—Members of Duston Congregational Church propose building, at £5,000.

**North Rigton (Yorks).**—Building Committee of Memorial Institute acquired site for building.

**Nottingham.**—Managers of Nottingham and Nottinghamshire Hospital for Diseases of Throat, Ear and Nose, Goldsmith-st., proposing extensions.

**Old Snydale.**—West Riding C.C. have approved plans for reconstruction works at Council school, at £665.

**Orrell.**—U.D.C. propose 86 houses on Park-rd. site.

**Oxenhope.**—Raistrick & Sons, Tanners and Curriers, Hebden Bridge-rd., proposing extensions to works.

**Pocklington.**—R.D.C. to apply to M.H. for sanction to 20 further houses.

**Preston.**—Extensions proposed at Larkhill Convent, at £15,000.

**Preswick.**—Church hall and various other rooms, and accommodation for Preswick North Church. Cost £33,000. A. Mair, architect, Wellington-sq., Ayr.

**Rawtenstall.**—Managers of C.E. school, Newchurch, propose sanitary conveniences.

**Rochester.**—T.C. approved:—6 houses, City-way, H. W. Bowman; showroom, 65, Strood High-st., Fehrenbach Bros.

**Rugby.**—Franklyn & Newman, 22a, Regent-st., architects for cafe in London-rd., Willoughby, for Coaching Cafes, Ltd.

**Skelton.**—Lancaster T.C. received sanction from B. of E. to erect senior mixed school.

**Southampton.**—T.C. approved: 7 houses and shops, Butterne-rd., Armstead & Co.; hall, Widelane, Swaythling Club; hotel, Spring-rd., Brickwood & Co., Ltd.; 7 houses, Burgess-rd., R. E. V. James; alterations, "Belvidere Inn," Belvidere-rd., Phœnix Wharf & Coal Co., Ltd., cinema, Park-st., A. C. Palmer; 5 houses and shops, Oakley-rd., W. M. Mitchell.

**Southend-on-Sea.**—C.B. approved: alteration and addition, Thorpe Hall school, Thorpe Hall-av., Rev. E. D. de Rusett; alterations and additions, 715, London-rd., Howard's Dairies, Ltd.; 6 houses, Royston-av., S. Spackman; 6 houses, Poynings-av., Purkiss Bros.

**Southgate.**—U.D.C. approved:—4 flats and three garages, Fairway, junction of Reservoir-rd., N.14, J. Scarborough; 32 flats and 10 garages fronting Green-lanes, and a new road off Green-lanes, N.21, for Misses Ingram; 10 lock-up garages on land adjoining 60, Highfield-rd., for W. G. Kearsey; layout of 31 houses and 31 garages rear of Meadway, N.14, for Temple Estates Co.

**South Shields.**—Negotiations been completed for acquisition by Sutton Dwellings Trust, of London, from Col. R. Chapman, M.P., of 34 acres of land on east side of South Shields Corporation's estate at Cleadon-pk. for 350 houses.

**South Shields.**—T.C. considering slum clearance scheme, affecting Mitre-st. area. J. P. Watson, B.E.

**Springhead.**—Council proposing 20 houses at Grotton.

**Stansted.**—R.D.C. to proceed with preliminary arrangements for scheme to provide 70 houses.

**Sterling.**—Reconstruction scheme at Cowans-st. A. Sands, architect, 5, Pitt-ter.

**Stokesley.**—R.D.C. approved: 10 semi-detached houses, Springfield, G. Dobson.

**Stourbridge.** — Wolverhampton and Dudley Breweries Park Brewery, Wolverhampton, proposing extensions to "Talbot Hotel," High-st. Plans by A. T. Butler, F.R.I.B.A., architect, 31, Priory-st., Dudley.

**Stranraer.**—Corporation to erect new housing scheme of 40 houses. J. Mercer, Burgh Housing Architect.

**Stretford.**—Greyhound Racing Association propose a totalisator building at White City, Chester-rd.

**Sunderland.**—B.E. approved and E.C. to obtain tenders, scheme for conversion of Ashburn House into school of art. O. T. Mark, Borough Architect.

**Swindon.**—E.C. approved preparation of plans for new school at Pinehurst.

**Thornaby-on-Tees.**—T.C. approved plans for Baptist Sunday school in Thorntree-rd.—Cleveland Flour Mills, Thornaby, propose extensions to silo.

**Tynemouth.**—T.C. approved:—garages, The Quadrant, Woodall & Shepherd; 10 houses, Salisbury-av., Dixon & Bell, for W. H. Browse; 11 houses in flats, Salisbury-av., Dixon & Bell, for A. Carpenter.

**Tynemouth.**—Tenders not yet been submitted for alterations to "Tynemouth Lodge Hotel." Plans by F. R. N. Haswell & Sons, 77, Tyne-st., North Shields.

**Wallingford.**—R.D.C. resolved to build 30 houses at Didcot. Mr. Floyd is the architect.

**Wallsend-on-Tyne.**—Wallsend Nursing Association received £1,000 from Sir George Hunter, for nurses' home. Site in Station-rd. Claws & Heseltine, Fawcett-st., Sunderland, will prepare plans.

**Warrington.**—Board of Management of Warrington Infirmary and Dispensary, Kendrick-st. (Sec., H. L. Boot), proposing alterations to present nurses' home and two adjoining houses for conversion into private nursing block. Cost £10,000. Plans by S. P. Silcock, F.R.I.B.A., architect, Egypt-st.

**Wath.**—R.D.C. to erect 22 houses.

**Weetslade.**—Council to purchase land at Annitsford for housing purposes. H. G. McNaught, S.

**West Ham.**—T.C. approved:—alterations to showroom, 44-46, Balaam-st., A. Webb; alterations, 131, Forest-lane, H. Campbell; scouts' hall, on land adjoining 29, Varley-rd., F. Hamlett; alterations, 262-4, Queen's-rd., A. H. Middleton; sub-station, Grange-rd., Borough Electrical Engineer; alterations, 383, Queen's-rd., W. Beattie, Ltd.; mission hall, 36, Nelson-st., F. L. Buckley; alterations, 717-719, Barking-rd., R. C. T. Gordon; alterations, 228a, Romford-rd., Harris & Sheldon, Ltd.; new building, offices and flats, 185, Romford-rd., J. A. Bessant.

**West Kirby.**—H. L. Goldsmith, architect, 62, Dale-st., Liverpool, preparing plans for the reconstruction of the Queen's Theatre, Grange-rd., recently destroyed by fire, for Grange Hall (West Kirby), Ltd., 41, Arcade-bldgs., 85, Lord-st.

**Whickham (Durham).**—Permission for church hall been granted by Gateshead Wesleyan Methodist Circuit.

**Whitley Bay.**—Oliver & Roberts, engineers, submitted plans to U.D.C. for pier at Whitley Bay, and have asked Council to support them in event of applying for Parliamentary sanction.

**Wolverhampton.**—T.C. approved: E. Leach, 6 semi-detached villas, Hazel-rd., Oxbarn Estate; H. Grindley, 7 houses, Dunkley-st.; Wolverhampton & Dudley Breweries, Ltd., alterations to "Red Lion Inn," Great Hampton-st.; Bents Brewery, Ltd., alterations to "Queen's Hotel," North-st.

**Worksop.**—John Haslam, architect, of Ryton-chambers, Bridge-st., Worksop, has prepared plans for warehouses and offices in Eastgate, for the Co-operative Society.

**Wrexham.**—Board of Management of Wrexham and East Denbighshire War Memorial Hospital (L. Spencer, secretary) propose nurses' home at £16,000. Plans by E. P. Davies, architect, 2, Argyle-st.

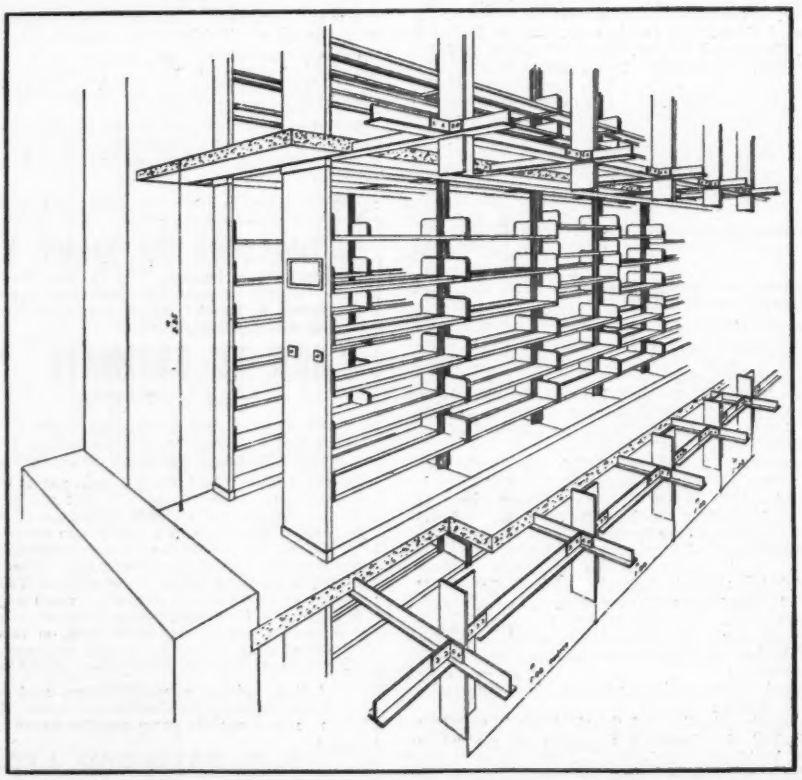
# LEAGUE OF NATIONS' BUILDING, GENEVA

## LIBRARY CONTRACT FOR BRITAIN.

In connection with the League of Nations' Palace now being erected at Geneva, the news that Great Britain has at last secured an important contract on this building will give considerable satisfaction, the more especially in view of Lord Hailsham's recent statement in the House of Lords to the effect that although every firm in this country had had an opportunity to tender for the main building contract, no tender had been sent in. The contract in question is for the supply and erection of the 10-story Book-Stack and the two-story Newspaper Stack, the necessary steel construction, concrete floors, passenger lifts, staircases, book-conveyors, heating and lighting, and has been obtained, in the face of international competition, by Messrs. Roneo, Ltd., of 5-11, High Holborn, E.C.1.

The details of this contract, which is between £40,000 and £50,000 in value, are interesting. The 10-story Stack is 16.30 metres wide, 36.60 metres long, and will contain approximately 34 miles of steel shelving. The Newspaper Stack is only two tiers high, the centre portion of which is 19.10 m. by 27.50 m. The construction has been worked out so that the steel constructional uprights and concrete floors can be erected at the same time or before the outside walls. The steel constructional uprights are placed on centres 1 m. by 1.35 m., and will carry all the intermediate floors, live load, shelving, and book loads, together with the flat roof. With this method the whole of the carcase of the building can be finished before any highly enamelled work is delivered to the site.

In order to give the maximum head room the floors are made of reinforced concrete poured *in situ* 6½ centimetres thick. All conduits will be concealed in these floors, which will be perfectly flush on the underside, no steelwork being visible. Constructional uprights are clothed by formed-up sheet steel members which are perforated to receive the shelves. The shelves in the Bookstack are of the bracket type and are adjustable on 1-in. centres. The end panels of all stacks are of double construction, and will house the conduits and switches. A passenger lift and staircase are provided in the centre of the Stack, the passenger lift being of the fully automatic push-button type control. Staircases will be entirely of metal, the treads being finished with corrugated rubber, bronze nosings and balustrading with bronze handrail. On the third and sixth tiers a number of study compartments are to be provided, which will be furnished with tables and chairs for the use of readers. The lighting throughout has been carefully planned, the lights in the side aisles being controlled by a push-button switch which will automatically cut off after three minutes. The main aisles are controlled by double-pole switches also situated in the end panels. A fully automatic book conveyor, running vertically through the ten-story Stack will be provided to enable any book to be sent from or to any particular floor. On the third tier a belt conveyor will be provided, which will carry the books along an underground channel from the Bookstack to the Secretariat, 165 m. distant. The two-story Newspaper Stack is situated immediately beneath the reading-room, the floor of which is carried on the Newspaper Stack uprights. The floor to the reading-room and also the intermediate floor will be in reinforced concrete, poured *in situ*. A separate lift is to be provided which will serve the two tiers in the Newspaper Section and also the reading-room. The heating of the whole of the Stack will be by radiators with hot-water forced circulation. The floors will be finished with "korkoid" or similar linoleum, 4 millimetres thick. The end panels, staircases and lift enclosure are to be finished in cream colour, all shelves and uprights in a special green shade. This will give the maximum amount of light. The whole scheme, we learn, was prepared by the Art Metal Equipment Department of the company, in London.



**Isometric Detail of Library Equipment, League of Nations' Palace, Geneva.**

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### Modern Home and Building Exhibition, Brighton.

The second Modern Home and Building Exhibition is being held in the Dome and Corn Exchange, Brighton, from March 30 to April 9. Communications should be addressed to the Southern Publicity Service, 181, Sussex-street, Brighton.

# PRICES CURRENT OF MATERIALS.*

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| Headers | 20 10 0 | D'ble Headers | 26 10 0 |
| Quoins, Bullnose and 4½ in. Flats | 27 10 0 | One Side and two Ends | 30 10 0 |
| | | Two Sides and one End | 31 10 0 |
| | | Splays, and Squints | 28 0 0 |

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours Hard Glaze, £5 10s. extra over white.

### BREEZE CONCRETE SLABS.

Delivered London.

| | s. d. | | s. d. |
|---|---|---|---|
| 2 in. per yd. super | 1 11 | 3 in. per yd. super | 2 9 |
| 2½ in. „ „ | 2 4 | 4 in. „ | 3 6 |

| | s. d. | |
|---|---|---|
| Thames Ballast | 8 0 per yd | delivered 2 miles radius Paddington |
| Pit Sand | 11 0 „ „ | |
| Thames Sand | 11 0 „ „ | |
| Best Washed Sand | 11 6 „ „ | |
| ½ in. Shingle for Ferro-Concrete | 8 6 „ „ | |
| ¾ in. | 11 0 „ „ | |
| ¾ in. Broken Brick | 10 6 „ „ | |
| Pan Breeze | 8 0 „ „ | |

Per ton delivered in London area in full van loads.

Best Portland Cement. British Standard Specification. Test

| | | | | | |
|---|---|---|---|---|---|
| In Jute Sacks (11 to ton) | £2 | 4 | 9 to | £2 | 6 9 |
| In Free Paper Bags (20 to ton) | 2 | 6 | 0 to | 2 | 8 0 |

Alongside Vauxhall in 80 Ton Lots

| | |
|---|---|
| Jute Sacks (11 to ton) | 1 17 9 |
| Free Paper Bags (20 to ton) | 1 19 0 |
| Ferrocrete per ton extra on above | 0 7 6 |
| Vitocrete per ton extra on above | 0 7 6 |
| Lightning Brand Aluminous Cement in Jute Sacks (20 to ton) | 5 2 9 to 5 8 3 |

NOTE.—Jute Sacks are charged 1s. 6d. each and credited 1s. 6d. each nett if returned in good condition within three months carriage paid.

| | |
|---|---|
| Super Cement (Waterproof) Paper Bags free | 3 16 0 |
| Ciment Fondu (F O.R. Works) | 4 15 0 |
| Roman Cement | 6 15 0 |
| Parian Cement | 5 15 0 |
| Keene's Cement, White | 5 15 0 |
| „ „ Pink | 5 10 0 |
| Plaste Coarse, Pink | 3 0 0 |
| „ „ White | 3 12 6 |
| „ „ Fine | 4 12 0 |
| Sirapite, Coarse | 3 9 0 |
| „ Finish | 3 17 0 |
| Grey Stone Lime | 2 10 9 |
| Chalk Lime | 2 10 9 |
| Best Ground Blue Lias Lime | 1 17 6 |
| Hair per cwt. | 2 2 6 |
| Granite Chippings | 1 12 0 |

NOTE.—Sacks are charged 1s. 9d. each and credited 1s 6d. if returned in good condition within three months carr. pd.

Stourbridge Fireclay in s'cks 37s. 0d. per ton at rly. dp.

## STONE.

| | s. d. |
|---|---|
| BATH STONE.—Delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube | 2 10 |
| BEER STONE—RANDOM BLOCK— Free on rail at Seaton Station per ft. cube | 2 3 |
| Delivered free on rail Nine Elms, S.R. per ft. cube | 3 1½ |
| Selected approximate size one way, 1d. per cubic foot extra; selected approximately three sizes or for special work, 3d. per cubic foot extra. | |
| PORTLAND STONE— Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, S. Rly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G W.R., per ft. cube | 4 4½ |
| Do. do. delivered on road wagons at above stations, per ft. cube | 4 5½ |
| White basebed, 3d. per ft. cube extra. | |
| NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft. | |
| CHILMARK—RANDOM BLOCK— At Nine Elms, per ft. cube | 3 11 |
| HOPTON-WOOD STONE— F.O.R. Quarries, Wirksworth, Derbyshire, | p d. |
| Random blocks from 10 ft. and over P. ft. cb. | 14 0 |
| Sawn two sides „ | 22 6 |
| Sawn three or four sides „ | 27 6 |
| YORK STONE, BLUE—*Robin Hood Quality.* Delivered at any Goods Station, London | |
| 6 in. sawn two sides landings to sizes (under 30 ft. super) Per ft. super | 5 6 |
| 6 in. rubbed two sides, ditto | 6 0 |
| 3 in. sawn two sides slabs (random sizes) | 2 3½ |
| 2 in. to 2½ in. sawn one side slabs (random sizes) „ | 1 6½ |
| 1½ in. to 2 in. ditto, ditto „ | 1 3½ |
| HARD YORK— Delivered at any Goods Station, London. | s. d. |
| Scappled random blocks Per ft. cube | 6 3 |
| 6 in. sawn two sides landing to sizes (under 40 ft. super) Per ft. super | 5 1½ |
| 6 in. rubbed two sides, ditto „ | 6 1½ |
| 4 in. sawn two sides slabs (random sizes) „ | 3 1½ |
| 3 in. ditto ditto „ | 2 8 |
| 2 in. self-faced random flags Per yd. super | 8 3 |

## CAST STONE.

Delivered in London area in full van loads, per ft. cube: Plain, 8s. 6d.; Moulded, 9s. 6d.; Cills, 10s. 0d.

## WOOD.

### GOOD BUILDING DEAL.

| Inches. | per stan. | Inches. | per stan. |
|---|---|---|---|
| 4 × 11 | £24 10 | 5 × 6 | £17 0 |
| 4 × 9 | 20 0 | 3 × 11 | 19 10 |
| 4 × 8 | 20 0 | 2 × 11 | 19 10 |
| 4 × 7 | 18 0 | 3 × 9 | 19 10 |
| 3 × 8 | 18 0 | 2½ × 9 | 19 10 |
| 3 × 7 | 18 0 | 3 × 4½ | 17 10 |
| 2½ × 7 | 18 0 | 3 × 4 | 17 10 |

### PLANED BOARDS.

| | | | |
|---|---|---|---|
| 1 × 11 | £22 10 | 1 × 9 | £21 0 |

### PLAIN EDGE FLOORING.

| Inches. | per sq. | Inches. | per sq. |
|---|---|---|---|
| ⅝ | 16/- | 1¼ | 25/- |
| ¾ | 17/- | 1½ | 27/6 |
| 1 | 20/- | | |

### TONGUED AND GROOVED FLOORING

| Inches | per sq. |
|---|---|
| 1 | 21/- |
| 1¼ | 26/- |
| 1½ | 27/6 |

| ins. BATTENS. | s. d |
|---|---|
| ⅞ × 2 per 100 ft. | 2 0 |

### MATCHING (BEST).

| Inches. | per sq. |
|---|---|
| ⅝ | 15/- |
| ¾ | 16/6 |
| 1 | 20/- |

### SAWN LATHS.

| | s. d. |
|---|---|
| Per bundle | 2 3 |

### 1 INCH AND UP THICK.

| Average price for prime quality. | £ s. d |
|---|---|
| Dry Austrian Wainscot, per ft. cubs. | 0 15 0 |
| Dry American and/or Japanese Figured Oak, per ft. cube | 0 12 0 |
| Dry American and/or Japanese plain Oak, per ft. cube | 0 10 0 |
| Dry sq. edged Honduras Mahogany, per ft. cube | 0 14 0 |
| Dry log-cut Honduras Mahogany, per ft. cube | 0 16 0 |
| Dry Cuba Mahogany, per ft. cube | 1 1 0 |
| Dry Teak, per ft. cube | 0 14 0 |
| Dry American Whitewood, per ft. cube | 0 10 0 |
| Best Scotch Glue, per cwt. | £4 10 0 to — |
| Liquid Glue, per cwt. | 4 7 0 to 5 10 0 |

## SLATES

First quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 actual.

| | £ s. d. | | £ s. d. |
|---|---|---|---|
| 24 by 12 | 30 0 0 | 18 by 10 | 16 10 0 |
| 22 by 12 | 26 10 0 | 18 by 9 | 14 12 6 |
| 22 by 11 | 24 10 0 | 16 by 10 | 14 5 0 |
| 20 by 12 | 24 0 0 | 16 by 8 | 11 0 0 |
| 20 by 10 | 20 2 6 | | |

## TILES

Delivered at London rate stations in full truck loads (if not less than 6 tons.

| | Per 1,000. f.o.r. London. |
|---|---|
| Best machine-made tiles from Broseley or Staffordshire district | £4 10 0 |
| ditto hand-made ditto | 5 3 6 |
| Ornament 1 ditto | 5 8 6 |
| Hip and valley tiles (per dozen) Hand-made | 0 9 6 |
| Hip and valley tiles (per dozen) Machine-made | 0 9 0 |

## METALS.

| | |
|---|---|
| JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON— R.S. Joists, cut and fitted | £11 0 0 |
| Plain Compound Girders | 13 0 0 |
| „ „ Stanchions | 15 0 0 |
| In Roof Work | 18 0 0 |

MILD STEEL ROUNDS.—To London Station, per ton

| Diameter. | £ s. d. | Diameter. | £ s. d. |
|---|---|---|---|
| ½ in. | 12 0 0 | ⅝ in. to ½ in. | 10 15 0 |
| ⅝ in. | 11 0 0 | ¾ in. to 2½ in. | 10 10 0 |

WROUGHT-IRON TUBES AND FITTINGS—

Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward, if sent from London Stocks.)

| | Standard Wrot. Mild Steel Tubes and Tubulars Sizes ⅛ in. to 6 in. | Genuine Wrot. (Puddled) Iron Tubes and Tubulars Sizes ⅛ in. to 6 in. | Standard Fittings Sizes ⅛ in. to 6 in. | Standard Flanges Sizes ⅛ in. to 6 in. |
|---|---|---|---|---|
| | % | % | % | % |
| Gas | 65 | 52½ | 57½ | 70 |
| Water | 61½ | 48½ | 52½ | 65 |
| Steam | 57½ | 45 | 47½ | 60 |
| Galv. gas | 52½ | 40 | 47½ | 60 |
| Galv. water | 47½ | 35 | 42½ | 55 |
| Galv. steam | 42½ | 30 | 37½ | 50 |

C.I. HALF-ROUND GUTTERS—London Prices ex Works.

| Per yd. in 6 ft. lengths. | Gutters. | Angles and Nozzles. | Stop Ends. |
|---|---|---|---|
| 3 in. | 11d. | 1/5 | 5d. |
| 3½ in. | 11½d. | 1/7 | 5d. |
| 4 in. | 1/-½ | 1/9 | 5d. |
| 4½ in. | 1/1½ | 2/- | 6d. |
| 5 in. | 1/5 | 2/2 | 8d. |
| O.G. GUTTERS. | | | |
| 3 in. | 1/1 | 1/11 | 5d. |
| 3½ in. | 1/2 | 1/11 | 5d. |
| 4 in. | 1/2½ | 2/- | 5d. |
| 4½ in. | 1/4 | 2/4 | 6d. |
| 5 in. | 1/6½ | 2/8 | 8d. |

### RAIN WATER PIPES, &c.

| Per yd. in 6 fts. | Pipe. | Bends, stock angles. | Branches. stock angles. |
|---|---|---|---|
| 2 in. | 1/3½ | 1/9 | 2/7 |
| 2½ in. | 1/4½ | 2/- | 3/1 |
| 3 in. | 1/8½ | 2/6 | 3/9 |
| 3½ in. | 2/1½ | 3/- | 4/4 |
| 4 in. | 2/5 | 3/7 | 5/3 |

Connections—50 per cent. off above prices.
Tonnage allowance—4 ton lots, 5 per cent.
2 ton lots, 2½ per cent.

L.C.C. COATED SOIL PIPES—London Prices ex Works.

| | Pipe, angles, stock angles. | Bends, stock Branches. | |
|---|---|---|---|
| | s. d. | s. d. | s. d. |
| 2 in. per yd. in 6 fts. | 1 11 | 1 6½ | 1 10½ |
| 2½ in. „ | 2 3½ | 1 8½ | 2 4 |
| 3 in. „ | 2 4½ | 1 10½ | 2 9½ |
| 3½ in. „ | 2 7 | 2 4 | 3 3 |
| 4 in. „ | 2 11 | 2 7½ | 3 9 |

L.C.C. COATED DRAIN PIPES—London Prices ex Works

| | Pipe, angles, stock angles. | | Bends, stock Branches. | | |
|---|---|---|---|---|---|
| | s. d. | | s. d. | | s. d. |
| 3 in. per yd. in 9ft. lengths | 3 4 | | 4 3 | | 6 3 |
| | cwt. | qr. | lbs. | | |
| 4 in. „ | 1 | 1 | 20 | 4 7 | 5 2 8 10 |
| 5 in. „ | 1 | 2 | 22 | 6 0 | 9 0 14 3 |
| 6 in. „ | 2 | 0 | 6 | 6 8 | 10 11 18 1 |

Gaskin for jointing 41/- per cwt.

| IRON— | Per ton in London. £ s. d. | £ s. d. |
|---|---|---|
| Common bars | 10 10 0 to | 11 0 0 |
| Staffordshire Crown Bars Good merchant quality | 10 15 0 to | 11 10 0 |
| Staffordshire Marked Bars | 14 0 0 ... | 15 0 0 |
| Mild Steel Bars | 9 10 0 ... | 10 0 0 |
| Steel Bars, Ferro-Concrete quality, basis price | 8 0 0 ... | 9 0 0 |
| Hoop iron, basis price | 11 0 0 ... | 12 0 0 |
| „ Galvanised | 27 0 0 ... | 28 0 0 |
| Soft Steel Sheets, Black— Ordinary sizes, to 20 g. | 11 0 0 ... | 11 10 0 |
| „ „ „ 24 g. | 12 0 0 ... | 13 0 0 |
| „ „ „ 26 g. | 14 0 0 ... | 15 0 0 |
| Sheets Flat Best Soft Steel, C.R. and C.A. quality— Ordinary sizes, 6 ft. by 2 ft to 3 ft. to 20 g. | 13 10 0 ... | 14 10 0 |
| Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g. | 14 10 0 ... | 15 10 0 |
| Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g. | 17 10 0 ... | 18 10 0 |
| No. 1 quality £4 per ton extra. | | |
| Flat and Galvanised Corrugated Sheets— Ordinary sizes 6 ft. to 9 ft. to 20 g. | 13 0 0 ... | 14 0 0 |
| Ordinary sizes 6 ft. to 9 ft. to 22 g. and 24 g. | 14 10 0 ... | 15 10 0 |
| Ordinary sizes, 6 ft. to 9 ft. to 26 g. | 16 10 0 ... | 17 10 0 |
| Sheets Galvanised Flat, Best quality— Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker | 18 0 0 ... | 19 0 0 |
| Best Soft Steel Sheets. 22 g. and 24 g. | 20 0 0 ... | 22 0 0 |
| Best Soft Steel Sheets, 26 g. | 21 10 0 ... | 23 0 0 |
| Cut Nails, 3 in. to 6 in. | 15 0 0 ... | 16 0 0 |

(Under 3 in. usual trade extras.)

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

## COPPER.

| | s. d. |
|---|---|
| Seamless Copper tubes (basis) per lb. | 0 9½ |
| Strong sheet „ | 0 10 |
| Thin „ | 0 11 |
| Copper nails „ | 1 0 |
| Copper wire „ | 0 11 |

### PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

| ½ in. | ¾ in. | 1 in. | 1¼ in. | 1½ in. | 2 in. |
|---|---|---|---|---|---|
| 29/- | 45/- | 76/- | 153/- | 246/- | 510/- per doz. |

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

| ½ in. | ¾ in. | 1 in. | 1¼ in. | 1½ in. | 2 in. |
|---|---|---|---|---|---|
| 41/6 | 62/- | 92/- | 174/- | 300/- | 588/- per doz |

RIVER PATTERN SCREW DOWN MAIN FERRULES.

| ½ in. | ¾ in. | 1 in. |
|---|---|---|
| 39/6 | 60/- | 116/6 per doz. |

CAPS AND SCREWS.

| 1¼ in. | 1½ in. | 2 in. | 3 in. | 3½ in. | 4 in. |
|---|---|---|---|---|---|
| 7/6 | 10/- | 14/- | 23/- | 30/- | 42/- per doz. |

DOUBLE NUT BOILER SCREWS.

| ¾ in. | ¾ in. | 1 in. | 1¼ in. | 1½ in. | 2 in. |
|---|---|---|---|---|---|
| 7/6 | 11/- | 17/- | 29/- | 36/- | 63/- per doz. |

BRASS SLEEVES.

| 1½ in. | 2 in. | 3 in. | 3½ in. | 4 in. |
|---|---|---|---|---|
| 10/- | 12/- | 20/- | 24/- | 31/- per doz. |

NEW RIVER PATTERN CROYDON BALL VALVES S.F.

| ½ in. | ¾ in. | 1 in. | 1¼ in. | 1½ in. |
|---|---|---|---|---|
| 35/- | 56/- | 98/- | 162/- | 228/- per doz. |

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

| | 1½ in. | 1½ in. | 2 in. | 3 in. |
|---|---|---|---|---|
| 4 lbs. P. traps | 33/- | 41/- | 56/- | 101/- per doz. |
| 8 lbs. S. traps | 35/- | 45/- | 66/- | 126/- „ |

TIN.—English Ingots, 1/7 per lb. SOLDER.—Plumber's 9d., Tinmen's 10d., Blowpipe 11d. per lb.

*The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

## PRICES CURRENT OF MATERIALS—(*cont.*)

### LEAD, &c.

| (Delivered in London.) | £ | s. | d. |
|---|---|---|---|
| LEAD—Sheet, English, 4 lb. and up | 22 | 0 | 0 |
| Pipe in coils | 22 | 10 | 0 |
| Soil pipe | 25 | 10 | 0 |
| Compo pipe | 26 | 0 | 0 |

NOTE.—Country delivery, 20s. per ton extra; lots under 3 cwt. 3s. per cwt. extra, and over 3 cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes 5s. cwt. extra.

Old lead, ex London area, at Mills .....per ton £12 0 0

### PAINTS, &c.

| | | £ | s. | d. |
|---|---|---|---|---|
| Raw Linseed Oil, in pipes ..... | per gallon ... | 0 | 1 | 11 |
| ,, ,, ,, in barrels ... | ,, ... | 0 | 2 | 1 |
| ,, ,, ,, in drums ... | ,, ... | 0 | 2 | 4 |
| Boiled ,, ,, in barrels ... | ,, ... | 0 | 2 | 5 |
| ,, ,, ,, in drums ... | ,, ... | 0 | 2 | 7 |
| Turpentine in barrels ..... | ,, ... | 0 | 5 | 2 |
| ,, in drums (10 galls.) | ,, ... | 0 | 5 | 4 |
| Genuine Ground English White Lead, per ton | | 46 | 10 | 0 |

(In not less than 5-cwt. casks.)
Extra for 1-cwt. kegs over 5-cwt. casks is 5/9 cwt.

GENUINE WHITE LEAD PAINT.
"Father Thames." "Nine Elms," "Park," "Supremus," "St. Paul's," "Morganwyte," "Polacco," "J" Brand, and other best brands (in 14-lb. tins) not less than 5 cwt. lots. £ s. d.
per ton delivered ... 64 10 0
Red Lead, Dry (packages extra) ... per ton 34 0 0
Best Linseed Oil Putty ..... per cwt. 0 13 6
Size. XD quality .....fkn. 0 3 0

### GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

| Per ft. | | Per ft. | |
|---|---|---|---|
| 15 oz. fourths ... | 2½d. | 32 oz. fourths ..... | 7½d. |
| 15 ,, thirds ... | 3½d. | 32 ,, thirds..... | 9½d. |
| 21 ,, fourths ... | 3½d. | Obscured Sheet, 15 oz. ... | 3½d. |
| 21 ,, thirds ... | 4½d. | ,, ,, 21 oz. ... | 4½d. |
| 26 ,, fourths ... | 4½d. | Fluted, 15 oz. 7d., 21 oz.... | 9½d. |
| 26 ,, thirds ... | 7½d. | Em'lled, 15 oz. 4½d., 21 oz. | 6d. |

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED plate in CRATES OF STOCK SIZES.

| | Per ft. |
|---|---|
| ⅛ Rolled plate ..... | 4½d. |
| ⅜ Rough rolled ..... | 5½d. |
| Rough rolled ..... | 5½d. |
| Figured Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish White | 5½d. |
| Ditto, tinted ..... | 8d. |
| Rolled Sheet ..... | 4½d. |
| White Rolled Cathedral ..... | 4½d. |
| Tinted do. ..... | 6½d. |

Cast plate is same price as rough rolled.

| "VITA" GLASS. | Per foot. s. | d. |
|---|---|---|
| Clear sheet—not exceeding 1 foot ..... | 1 | 0 |
| Do. do. 2 feet..... | 1 | 3 |
| Do. over 2 feet ..... | 1 | 9 |
| Polished plate—not exceeding 1 foot ..... | 1 | 6 |
| Do. not exceeding 2 feet..... | 3 | 0 |
| Cathedral—not exceeding 1 foot ..... | 1 | 0 |
| Do. larger sizes ..... | 1 | 6 |
| Horticultural—for greenhouses, etc. Sizes up to 24 inches by 18 inches or not exceeding 3 feet ..... | 1 | 0 |
| /16 in. Wired Georgian Design. Sizes up to 108 inches long by up to 24 inches wide..... | 2 | 6 |

### VARNISHES, &c.

| | | Per Gallon. £ | s. | d. |
|---|---|---|---|---|
| Oak Varnish ..... | Outside | 0 | 14 | 0 |
| Fine ditto ..... | ditto | 0 | 16 | 0 |
| Fine Copal..... | ditto | 0 | 18 | 0 |
| Pale Copal..... | ditto | 1 | 0 | 0 |
| Pale Opal Carriage ..... | ditto | 1 | 4 | 0 |
| Best ditto ..... | ditto | 1 | 12 | 0 |
| Floor Varnish ..... | Inside | 0 | 18 | 0 |
| Fine Pale Paper ..... | ditto | 0 | 18 | 0 |
| Fine Copal Cabinet ..... | ditto | 1 | 2 | 0 |
| Fine Copal Flatting..... | ditto | 1 | 0 | 0 |
| Hard Drying Oak ..... | ditto | 0 | 18 | 6 |
| Fine Hard Drying Oak ..... | ditto | 0 | 19 | 6 |
| Fine Copal Varnish ..... | ditto | 1 | 0 | 0 |
| Pale ditto ..... | ditto | 1 | 12 | 6 |
| Best ditto ..... | ditto | 1 | 2 | 6 |
| Best Japan Gold Size..... | | 0 | 12 | 0 |
| Best Black Japan ..... | | 0 | 10 | 0 |
| Oak and Mahogany Stain (water)..... | | 0 | 12 | 6 |
| Brunswick Black ..... | | 0 | 7 | 0 |
| Berlin Black ..... | | 0 | 14 | 0 |
| Knotting (patent) ..... | | 1 | 5 | 0 |
| French and Brush Polish ..... | | 0 | 17 | 0 |
| Liquid Dryers in Terebene ..... | | 0 | 9 | 0 |
| Cuira Black Enamel ..... | | 0 | 7 | 0 |

### Proposed Exhibition Hall, Salford.

It is understood that Salford Corporation has entered into a contract with the Central Midland Trust, Ltd., for a lease of its Cattle Market site in Cross-lane. The lessees project a huge exhibition hall—a Northern Olympia—and other halls for sporting demonstrations, as well as a theatre and a ballroom. It is stated that there will be an early start in making use of the site.

# NEW COMPANIES

THE particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116 and 117, Chancery-lane, W.C.2, from the documents available at the Companies' Registry.

COLCHESTER BUILDERS' SUPPLIES, LTD. (262,947). Registered February 25. Builders' merchants, etc. Nominal capital, £2,000. A. S. Chambers, 67, Westleigh-avenue, Leigh-on-Sea.

ARCHITECTURAL TRADING CO., LTD. (262,942). Registered February 25. Architects', builders' and decorators' merchants, etc. Nominal capital, £1,000. P. Geddes, Heathfield Villa, Swansea.

F. C. STOCKMAN, LTD. (262,995). Registered February 26. Builders and decorators. 1a, Rosemount-parade, and Leggatts-grove, Finchley, Middlesex. Nominal capital, £5,000.

E. DYKE & SONS, LTD. (263,058). Registered February 29. Builders and contractors, etc. Nominal capital, £500. Mrs. H. Dyke, 478, Portway, Shirehampton, Bristol.

BUTLER BROS. (MARBLE AND GRANITE), LTD. (263,986). Registered February 26. 30, City-road, E.C.1. Marble, granite and stone merchants, etc. Nominal capital, £100.

WARRINGTON CONSTRUCTORS, LTD. (263,086). Registered February 29. 32, St. James's-street, S.W. To develop any building estate or housing scheme in the British Isles, or elsewhere, etc Nominal capital, £10,000.

M. FREEMAN & SONS, LTD. (263,175). Registered March 3. 140, Lower-road, Rotherhithe, S.E.16. Builders' merchant. Nominal capital, £1,000.

WOODBANK ESTATE, LTD. (263,188). Registered March 3. 1, Leadenhall-street, E.C.3. Joinery manufacturers, builders and contractors; to acquire and prepare land for building purposes, etc. Nominal capital, £100.

KIDDERPORE TRUST, LTD. (263,172). Registered March 3. 317, High Holborn, W.C.1. Builders, contractors, etc. Nominal capital, £100.

AMHURST PARK ESTATES, LTD. (263,109). Registered March 2. 52, Gloucester-road, Finsbury Park, N.4. Constructors of sewers, roads, buildings, etc. Nominal capital, £500.

CARPAVE, LTD. (263,308). Registered March 8. Road surface construction and manufacture. Nominal capital, £10,000. W. H. Hutchinson, 72/74, Victoria-street, S.W.1.

FRANK SHEARD, LTD. (263,199). Registered March 4. 1, Brook-street, Elland. Plumbers, glaziers, sanitary engineers, etc. Nominal capital, £1,000.

BATTLEBRIDGE BUILDING PRODUCTS, LTD. (263,307). Registered March 8. 9, Phœnix-place, Mount Pleasant, W.C.1. Builders, etc. Nominal capital, £1,000.

T. WALKER & SON (BUILDERS), LTD. (263,300). Registered March 7. Builders, etc. Nominal capital, £1,000. T. Walker, 46, Egerton-road, Stockport.

# PATENTS

APPLICATIONS PUBLISHED.

367,466.—Heenan and Froude, Ltd., and A. S. Spencer: Construction of joist concrete floors and flat roofs.

367,387.—W. Kunst: Method of lining and coating metal pipes and receptacles.

367,417.—J. W. Mellwig: Scraping or surfacing of floors.

367,419.—F. Herbert, and Stewarts and Lloyds, Ltd.: Joints of pipes of ductile materials.

367,434.—L. Robertson: Door and other braces, ledges, or rails.

367,448.—J. A. Moffat: Fire-places.

367,456.—Soc. Des Chaussures Cecil, and G. E. and J. Dennery: Shop-fitting system permitting the transformation of a sales shop into a display hall.

367,472.—M. S. Hurley: Windows and doors.

367,473.—G. F. Pittar: Pivots for swinging window sashes or structures.

367,505.—G. Polysius Akt.-Ges.: Method of and apparatus for baking sludgy material, such as cement.

367,538.—J. D'Asseler: Glazing.

*Note.*—Period for opposition expires May 2, 1932.

# NEW BUILDINGS IN SCOTLAND

**Denny.** — EXTENSIONS. — Plans have been passed by the T.C. for alterations and extensions to St. Alexander's Catholic Church.

**Glasgow.**—BUILDINGS.—The Dean of Guild Court has approved the following :—Corporation Health Department, school and child welfare centre at Glenbarr-street and Rhymer-street; Askit, Ltd., 562, Keppochhill-road, factory and offices at Saracen-street and Kilearn-street; C. Hays, 24, Stockwell-street, alteration to warehouse at 22-26, Stockwell-street; W. Milne, Ltd., 40, Old Wynd, extension to 29-45, Old Wynd; Corporation Education Department, manual instruction room at St. George's-road School.

**Glasgow.**—HOUSES.—Several applications by the Housing Department of the Corporation to erect housing schemes in different parts of the city were approved by the Dean of Guild Court. The largest scheme will be at East Keppoch, east of Saracen-street and Barloch-street, and the dwellings to be erected include 33 one-apartment, 114 two-apartment, 787 three-apartment, and 168 four-apartment houses. Another scheme will be at Cuthelton-street, Tollcross, and will comprise 66 houses of two apartments, 402 of three apartments, and 66 of four apartments. Eight three-apartment houses are to be erected at the Wellmeadow scheme; four four-apartment and 24 three-apartment houses at Kennyhill and Riddrie; and 52 three-apartment and 14 four-apartment dwellings at Calder-street, Govan-hill.

# BUILDING TRADE WAGES IN SCOTLAND*

Following are grade rates authorised by the Scottish N.J.C. for Building Industry. The bricklayers in the Glasgow district have ½d. per hour extra. It should be noted that plasterers and painters who are not parties to the Scottish N.J.C. pay higher wages of 1d. and ½d. per hour extra respectively. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

| Grade Classifications ... | A | A¹ | A² | A³ | B | B¹ | B² | B³ |
|---|---|---|---|---|---|---|---|---|
| Craftsmen ... ... | 1/6½ | 1/6 | 1/5½ | 1/5 | 1/4½ | 1/4 | 1/3½ | 1/3 |
| Labourers ... ... | 1/2 | 1/1½ | 1/1½ | 1/0½ | 1/0½ | 1/- | /11½ | /11½ |

| | | | | | |
|---|---|---|---|---|---|
| Aberdeen | A | Dundee | A | Hawick | A² |
| Airdrie | A | Dunfermline | A | Helensburgh | A |
| Alexandria | A | Dunoon | A | Inverness | B |
| Arbroath | A² | East Lothian | A | Kilmarnock | A |
| Ayrshire | A | Edinburgh | A | Kincardineshire | A² |
| Bathgate | A | Falkirk | A | Kinross-shire | A |
| Bo'ness | A | Forfarshire | A² | Kirkcaldy | A |
| Broughty Ferry | A | Fort William | A | Lanarkshire | A |
| Clackmannanshire | A | Galashiels | A² | Leith | A |
| Coatbridge | A | Glasgow | A | Midlothian | A |
| Dumbartonshire | A | Greenock | A | Motherwell | A |
| Dumfries | A² | Hamilton | A | Peeblesshire | A² |
| Dumfriesshire | A² | | | | |

| | | | |
|---|---|---|---|
| Perth | A | Renfrewshire | A |
| Perthshire | A² | Rothesay | A |
| Peterhead | A² | Roxburghshire | A² |
| St. Andrews | A | Selkirkshire | A² |
| Stirling | A | Stirlingshire, West | A² |
| West Lothian | A | Wishaw | A |

* The information given in this table is copyright. The rates of wages in various towns in England and Wales are given on page 618.

# CURRENT PRICES FOR BUILDING WORK IN LONDON*

## EXCAVATOR.

| | | s. | d. |
|---|---|---|---|
| Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep | per yard cube | 9 | 9 |
| Add if in clay | ,, ,, | 1 | 0 |
| Add for every additional depth of 6 ft. | ,, ,, | 0 | 6 |
| Planking and strutting to trenches | per foot super | 0 | 4 |
| Do. to sides of excavation, including shoring | ,, ,, | 1 | 0 |

## CONCRETOR.

| | | | |
|---|---|---|---|
| Portland cement concrete in foundation 1 to 6 | per yard cube | 27 | 0 |
| Add if in underpinning in short lengths | ,, ,, | 6 | 0 |
| Add if in floors 6 in. thick | ,, ,, | 2 | 6 |
| Add if in beams | ,, ,, | 3 | 0 |
| Add if aggregate 1 : 2 : 4 | ,, ,, | 10 | 0 |
| Add for hoisting not exceeding 10 ft. beyond the first 10 ft. | ,, | 2 | 0 |

## BRICKLAYER.

| | | £ | s. | d. |
|---|---|---|---|---|
| Reduced brickwork in lime mortar and Fletton bricks | per rod | 30 | 0 | 0 |
| Add if in stocks | ,, | 7 | 10 | 0 |
| Add if in Staffordshire blues | ,, | 22 | 0 | 0 |
| Add if in Portland cement and sand | ,, | 1 | 5 | 0 |

### FACINGS.

| | | | | |
|---|---|---|---|---|
| Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks | per ft. super | 0 | 0 | 1½ |

### POINTING.

| | | | | |
|---|---|---|---|---|
| Neat flat struck or weathered joint | ,, | 0 | 0 | 3 |

### ARCHES.

| | | | | |
|---|---|---|---|---|
| Extra only to the price of ordinary brickwork :— | | | | |
| Fair external in half brick rings | ,, ,, | 0 | 0 | 10 |
| Axed in stocks | ,, ,, | 0 | 0 | 9 |
| Rubbed and gauged jointed in putty camber or segmental | ,, ,, | 0 | 6 | 0 |

### SUNDRIES.

| | | | | |
|---|---|---|---|---|
| Damp course in double course of slates breaking joint and bedded in Portland cement | ,, ,, | 0 | 1 | 0 |
| Setting ordinary register grates and stoves | each | 1 | 0 | 0 |
| Setting kitchener, including forming flues, &c., with all necessary fire bricks | | 4 | 15 | 0 |

## ASPHALTER.

| | | s. | d. |
|---|---|---|---|
| Half-inch horizontal damp course | per yard super | 4 | 6 |
| Three-quarte -inch vertical damp course | ,, ,, | 9 | 6 |
| Three-quarter-inch on flats in two thicknesses | ,, ,, | 6 | 0 |
| Angle fillet | per foot run | 0 | 3 |
| Skirting and fillet 6 in. high | ,, ,, | 1 | 0 |

## MASON.

| | | | |
|---|---|---|---|
| York stone templates fixed | per foot cube | 13 | 0 |
| York stone sills fixed | ,, ,, | 22 | 0 |
| Bath stone and all labour fixed | ,, ,, | 10 | 6 |
| Beer stone and all labour fixed | ,, ,, | 15 | 0 |
| Portland stone fixed | ,, ,, | 20 | 0 |
| Chilmark stone fixed complete | ,, ,, | 17 | 6 |

## SLATER.

| | | | |
|---|---|---|---|
| Welsh 16 in. × 8 in. 3 in. lap, including nails | per square | 72 | 9 |
| Do. 20 in. × 10 in. Do. Do. | ,, | 80 | 9 |
| Do. 24 in. × 12 in. Do. Do. | ,, | 90 | 0 |

## CARPENTER AND JOINER.

| | | | | |
|---|---|---|---|---|
| Fir framed in plates | per foot cube | 4 | 3 | |
| Do. joists | ,, ,, | 4 | 9 | |
| Do. roofs, floors and partitions | ,, ,, | 5 | 3 | |
| Do. trusses | ,, ,, | 7 | 9 | |

| | ¾″ | 1″ | 1¼″ | 2″ |
|---|---|---|---|---|
| Deal rough close boarding per sq. | 33/6 | 38/- | 43/- | 70/- |

| | | | |
|---|---|---|---|
| Flat centering for concrete floor, including struts or hangers | ,, | 50 | 0 |
| Do. to beams | per ft. sup. | 0 | 9 |
| Centre for arches | ,, | 1 | 6 |
| Gutter boards and bearers | ,, | 1 | 0 |

### FLOORING.

| | ¾″ | 1″ | 1¼″ | 1½″ |
|---|---|---|---|---|
| Deal-edges shot per sq. | — | 42/6 | 50/- | 57/6 |
| Do. tongued and grooved ,, | — | 47/- | 56/- | 64/- |
| Do. matchings ,, | 44/- | 49/- | — | — |
| Moulded skirting, including backings and grounds per ft. sup. | 1/6 | 1/9 | 2/- | 2/6 |

### SASHES AND FRAMES.

| | | s. | d. |
|---|---|---|---|
| One-and-a-half moulded sashes or casements | per foot super | 1 | 10 |
| Two Do. Do. Do. | ,, ,, | 2 | 1 |
| Add for fitting and fixing | ,, ,, | 0 | 3 |
| Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights; average size | ,, ,, | 3 | 9 |

### DOORS.

| | 1½″ | 1¾″ | 2″ |
|---|---|---|---|
| Two-panel square framed per ft. sup. | 2/1 | 2/3 | 2/5 |
| Four-panel Do. ,, | 2/4 | 2/6 | 2/9 |
| Two-panel moulded both sides ,, | 2/6 | 2/9 | 2/11 |
| Four-panel Do. Do. ,, | 2/9 | 2/11 | 3/2 |

## CARPENTER AND JOINER—continued.

### FRAMES.

| | | s. | d. |
|---|---|---|---|
| Deal wrot moulded and rebated | per foot cube | 14 | 0 |

| | | 1″ | 1¼″ | 1½″ |
|---|---|---|---|---|
| Plain deal jamb linings framed | per ft. sup. | 1/1 | 1/8 | 1/11 |
| Deal shelves and bearers | ,, | 1/4 | 1/6 | 1/9 |
| Add if cross-tongued | ,, | 2d. | 2d. | 2d. |

### STAIRCASES.

| | 1″ | 1¼″ | 1½″ | 2″ | 2½″ |
|---|---|---|---|---|---|
| Deal treads and risers in and including rough brackets | 2/1 | 2/4 | 2/9 | — | — |
| Deal strings wrot on both sides and framed | 1/8 | 2/- | 2/2 | 2/8 | — |

| | | s. | d. |
|---|---|---|---|
| Housings for steps and risers | each | 0 | 11 |
| Deal balusters, 1 in. × 1¼ in. | per ft. run | 0 | 9 |
| Mahogany handrail average, 3 in. × 3 in. | ,, ,, | 6 | 0 |
| Add if ramped | ,, ,, | 12 | 0 |
| Add if wreathed | ,, ,, | 24 | 0 |

### FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

| | | | |
|---|---|---|---|
| 6 in. barrel bolts | 8½d. | Rim locks | 2/- |
| Sash fasteners | 11½d. | Mortice locks | 4/6 |
| Casement fasteners | 1/5 | Patent spring hinges and letting into floor and making good | 19/- |
| Casement stays | 1/2 | | |
| Cupboard locks | 1/5 | | |

## FOUNDER AND SMITH.

| | | s. | d. |
|---|---|---|---|
| Rolled steel joists | per cwt. | 15 | 3 |
| Plain compound girders | ,, | 18 | 0 |
| Do. stanchions | ,, | 20 | 9 |
| In roofwork | ,, | 26 | 6 |

## RAIN-WATER GOODS.

| | | 3″ | 4″ | 5″ | 6″ |
|---|---|---|---|---|---|
| Half-round plain rebated joints | ft. run | 1/4 | 1/7 | 1/9 | 2/- |
| Ogee Do. Do. | ,, | 1/6 | 1/9 | 2/3 | 2/9 |
| Rain-water pipes with ears | ,, | 1/6 | 2/4 | — | — |
| Extra for shoes and bends | each | 3/4 | 4/11 | — | — |
| Do. stopped ends | ,, | 1/6 | 1/10 | 2/9 | 3/3 |
| Do. nozzles for inlets | ,, | 2/2 | 2/7 | 3/10 | 4/3 |

## PLUMBER.

| | | s. | d. |
|---|---|---|---|
| Milled lead and laying in flashings and gutters | per cwt. | 40 | 0 |
| Do. Do. in flats | ,, | 39 | 0 |
| Extra labour and solder in coated cesspools | each | 6 | 9 |
| Welt joint | per ft. run | 0 | 6 |
| Soldered seam | ,, ,, | 1 | 3 |
| Copper nailing | ,, ,, | 0 | 3 |

| | ½″ | ¾″ | 1″ | 1½″ | 2″ | 4″ |
|---|---|---|---|---|---|---|
| Drawn lead waste per ft. run | 1/1 | 1/7 | 1/10 | 3/- | 3/6 | — |
| Do. service ,, | 1/6 | 2/- | 2/5 | 3/6 | — | — |
| Do. soil ,, | — | — | — | — | — | 6/- |
| Bends in lead pipe each | — | — | — | — | 3/- | 6/6 |
| Soldered stop ends ,, | 1/- | 1/4 | 1/9 | 2/6 | 3/2 | — |
| Red lead joints ,, | 11d. | 1/- | 1/3 | 1/11 | 2/4 | 4/10 |
| Wiped soldered joints ,, | 2/6 | 3/- | 3/6 | 4/4 | 5/6 | 7/9 |
| Lead traps and cleaning screws ,, | — | — | — | 12/7 | 17/6 | — |
| Bib cocks and joints ,, | 6/4 | 9/7 | 15/4 | 41/- | — | — |
| Stop cocks and joints ,, | 15/4 | 17/2 | 25/8 | 64/- | — | — |

## PLASTERER.

| | | s. | d. |
|---|---|---|---|
| Render, float and set in lime and hair | per yard sup. | 2 | 3 |
| Do. Do. Sirapite | ,, ,, | 2 | 6 |
| Do. Do. Keen's | ,, ,, | 3 | 6 |
| Add saw lathing | ,, ,, | 1 | 7 |
| Add metal lathing | ,, | 2 | 6 |
| (Not including hangers or runners, etc., for suspended ceilings.) | | | |
| Portland cement screed | ,, ,, | 2 | 2 |
| Do. plain face | ,, ,, | 3 | 3 |
| Mouldings in plaster | per 1 girth | 0 | 1½ |
| One-and-a-half granolithic pavings | per yard sup. | 5 | 3 |

## GLAZIER.

| | | s. | d. |
|---|---|---|---|
| 21-oz. sheet plain | per foot sup. | 0 | 7½ |
| 26-oz. Do. | ,, ,, | 0 | 10 |
| Obscured sheet | ,, ,, | 1 | 1 |
| ⅛-in. rolled plate | ,, ,, | 0 | 9 |
| ¼-in. rough rolled or cast plate | ,, ,, | 0 | 10 |
| ¼-in. wired cast plate | ,, ,, | 1 | 3 |

## PAINTER.

| | | s. | d. |
|---|---|---|---|
| Preparing and distempering, 2 coats | per yard sup. | 0 | 9 |
| Knotting and priming | ,, ,, | 0 | 7 |
| Plain painting, 1 coat | ,, ,, | 0 | 9 |
| Do. 2 coats | ,, ,, | 1 | 2 |
| Do. 3 coats | ,, ,, | 1 | 9 |
| Do. 4 coats | ,, ,, | 2 | 4 |
| Graining | ,, ,, | 2 | 3 |
| Varnishing twice | ,, ,, | 1 | 9 |
| Sizing | ,, ,, | 0 | 3 |
| Flatting | ,, ,, | 0 | 7 |
| Enamel | ,, ,, | 1 | 1 |
| Wax polishing | per foot sup. | 0 | 6 |
| French polishing | ,, ,, | 1 | 2 |
| Preparing for and hanging paper | per piece, 2/ to 4/- | | |

*These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges A percentage of ½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

# TRADE NEWS

**Lead Collars for Flush Pipe Connections.**

Details are issued of the "Welform" lead collar for flush pipe connections. This collar is of sound mechanical construction, and has many advantages for flush pipe to pass connection, being easily fixed and of permanent character. Full details are obtainable from Mr. H. E. Jones, 102, Forest-road, E.8, by whom a leaflet describing "Welform" lead astragals is also issued.

**Rotary Compressors and Volume Fans.**

The James Keith and Blackman Co., Ltd., issue from 27, Farringdon-avenue, E.C.4, a catalogue V.1, containing details of the Blackman fan. This fan is designed in a number of forms for various uses, as ventilation, drying, refrigeration, etc., etc. It is built to combine efficiency with strength for construction. Also issued is Catalogue G.57, which draws attention to the merits of the Keith rotary compressor, for air or gas. Copies of one or both catalogues are obtainable from the manufacturers.

**Air Compressors and Spray Paint Plant.**

B.E.N. Patents, Ltd., inform us that they have added several new models to their air compressor range and that the price of models in some instances have been revised. A brochure is obtainable from 92, Tottenham Court-road, W.1, for this range, as is also a new spray-paint catalogue which includes details of this company's very latest spray-paint equipment, featuring the B.E.N. paint-spray gun, combinations 1 and 2, as well as accessories.

**Gas Boilers.**

The National Radiator Co., Ltd., send us a leaflet for insertion in their current catalogue giving particulars of the Ideal No. 2GB gas boilers which they are just placing on the market. These are constructed on similar lines to the No. 1GB Ideal gas boilers introduced last year. Another inset shows the "Ideal Classic" boiler with the "Ideal" damper regulator and thermometer fixed directly into the top of the boiler instead of in circuit fittings at the side as hitherto. This new construction will be standard in future. Some of the company's products have, we learn, been reduced in price.

**Rubber Floors for Buildings.**

Many architects are turning to rubber flooring as a material for covering the floors in many types of public buildings—as offices, cinemas, town halls, hospitals, etc. Macinlop, Ltd., have issued a well-produced catalogue which shows in colour the application of their "Macinlop" rubber floorings. Advantages would seem to include durability, cleanliness, silentness, and water- and fire-proofness; and an important merit is the fact that such flooring materially improves acoustics. A number of important buildings in which Macinlop flooring has been laid are illustrated. A copy is obtainable from Cambridge-street, Manchester.

**Engineering Products.**

A little booklet, under the title of "What We Make," does indeed give a very fair impression of the wide range of products and the achievements of Ransomes and Rapier, Ltd. Illustrations and a necessarily brief description suggest the diversity of problems which this Ipswich firm has successfully handled, and these range from the Neuguen Barrage in the Argentine to excavators and mobile cranes. The same skill in application is brought to bear on the "R. and R." concrete mixers, which are manufactured in capacities of from 4½/3½ to 80/60 cub. ft. A record of useful and skilled achievement.

**Asphalte Firms' Amalgamation.**

The amalgamation is announced of the French Asphalte Company, Ltd., with Highways Construction, Ltd. The French Asphalte Company, Ltd., was founded in 1871 as the Société Française des Asphaltes, its name being changed in 1904 to The French Asphalte Company, Ltd. This company has always been a British company and its capital held entirely by British investors. Rock asphalte paving having only been introduced into London in 1869, it will be seen that the French Asphalte Company were one of the pioneers in this form of street surfacing. Many thousands of square yards have been surfaced by them for the City of London, including such heavily trafficked thoroughfares as Queen Victoria-street, Fenchurch-street, Cornhill, London Wall, etc., also in Glasgow, Portsmouth, Liverpool, Cardiff, etc. Their activities have not, however, been confined only to the United Kingdom, but on the Continent, in South America, Shanghai, etc., road surfacing has been carried out by them with the same unqualified success as has crowned their efforts in Great Britain. Their materials have been used also on many important buildings. To give a list of important buildings in connection with which their asphalte has been employed would mean tabulating a list of the most important buildings erected during the last fifty years. Mention, however, should be made of, amongst them, St. Paul's Cathedral; the Tate Gallery; the New Law Courts, Belfast; Thames House, Millbank; the New Freemasons Hospital; Town Hall, Shoreditch; Liverpool and London and Globe Insurance Building, Cornhill; and His Majesty's Theatre, Haymarket. Highways Construction, Ltd., were registered in 1913, in the early days of steam-rolled asphalte paving. During their much shorter term of existence they have, however, established a reputation throughout the kingdom for road surfacing work, many millions of yards having been laid since their inauguration. In addition to steam-rolled asphalte paving this company have been equally successful with the roads which they have surfaced with hand-laid natural granited rock asphalte paving, large areas of this form of paving having been laid in London, Liverpool and Scotland. In more recent years Highways Construction, Ltd., have erected a factory in England for the manufacture of compressed rock asphalte tile paving, and this class of paving is rapidly finding favour with road authorities. The amalgamation of the French Asphalte Company, Ltd., and Highways Construction, Ltd., does not involve any break in continuity of management, as the executive directors of the French Asphalte Company are joining the board of Highways Construction, Ltd., and the staff and organisation are also being taken into their service.

# NEW CINEMAS

**Eastbourne.**—The Corporation have passed plans for a cinema at North-street and Pevensey-road, for Mr. Walter Bentley. The architects are Messrs. J. Stanley Beard and Clare, F.&A.R.I.B.A., 101, Baker-street, W. We are informed that an announcement regarding the building contract will shortly be made.

**Leamington.**—The T.C. has passed plans for alterations to the Colonnade Cinema, Victoria-terrace, for Mr. A. V. Morris, proprietor.

**Marple.**—A contract for the conversion of the Union Rooms and three adjoining houses in Stockport-road into a cinema for the Marple Cinema Co., Ltd., 12 and 14, St. James-street, Sheffield (Mr. R. H. Sampson, 97, Middlewood-road, Sheffield, architect), has been placed with J. D. Swindells and Sons, New Mills, Derbyshire.

**Reigate.**—Preliminary plans for the new cinema and shops in London-road, for the Picture House, Reigate, Ltd., have been passed by the T.C. The architect is Col. J. E. Adamson, 56, Victoria-street, S.W.1, in conjunction with Messrs. Marshall and Tweedy, 4, Cavendish-place, W.1.

**Thornton Heath.**—Croydon C.B. has passed plans for a cinema proposed to be erected in London-road, Thornton Heath, for Mr. A. C. Matthews, 25, Church-road, Upper Norwood, S.E.19, who has also prepared the plans.

# TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted*.
† Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modifications*.
¶ Denotes *accepted by H.M. Office of Works and H.M. War Office*.

**Abergavenny.**—Repairing the two houses at Penbiddle-lane, Pandy, for the R.D.C. Mr. Merton Jones, architect:—

*J. H. Parry & Son, Pandy ..... £185

**Ashgillhead.**—For the Ashgillhead county housing scheme, for the Lanarkshire C.C. Mr. Peter Smith, Housing Architect, Clydesdale-street, Hamilton:—

*Excavation, brick and mason*—*A. Wright & Sons, Builders and Wrights, Blantyre.
*Joinery, carpentry and ironmongery*—*J. Y. Thorburn, Milton, Lesmahagow.
*Slater*—*J. & A. Rowatt, Machan-street, Larkhall.
*Plumber*—*S. Lander, Main-street, Uddingston.
*Plaster*—*R. Longmuir, Cement Worker, Larkhall.
*Painter*—*J. & D. Bryden, Decorators, Strathavon.

**Barking Town.** — Asphalting Erkenwald and Roding schools, for the T.C. Borough Engineer and Surveyor:—

*Limmer and Trinidad Lake Asphalt Co. £270

**Bedford.**—232 houses on the London-road site, for the T.C.:—

‡J. J. Hodgson & Sons, Ewell ... £69,786 15

**Bentley.**—Office buildings, steel frame garage and stores, etc., at Watch House-lane, Bentley, for the West Riding C.C. Mr. H. R. Hepworth, County Surveyor, County Hall, Wakefield:—

*J. H. Gilbert, Doncaster.

**Bilborough.**—Public-house at Broxtowe-lane, for Messrs. Hanson's, Ltd., Kimberley Brewery, Kimberley, near Nottingham. Mr. A. G. Wheeler, architect, "Orchardleigh," Eastwood, Nottingham. Quantities by Messrs. Barnes, Booth & Richardson, Albion-chambers, King-street, Nottingham:—

*Bosworth & Lowe, Nottingham.

**Birmingham.**—Rebuilding of the premises on an adjoining site of Arnolds Stores, 355, Hagley-road, Edgbaston:—

*B. Whitehouse & Sons, Ltd., 247, Monument-road, Birmingham.

**Blackhill.**—House in Woodlands-road, for Mr. J. W. Hughes. Mr. J. J. Eltringham, architect, Blackhill:—

*Joseph E. Walker, St. Ives-road, Leadgate, Co. Durham.

**Bridlington.**—Cafe at Thornwick Bay, Flamborough, for the Thornwick Estate Co.:—

*A. Robinson, Bridlington.

**Burnside.**—4 houses at Calderwood-road. Messrs. J. & J. Craig & Sons, architects, 219, St. Vincent-st., Glasgow:—

*James Laidlaw & Sons, Ltd., Playfair-street, Glasgow.

**Carmunnock.**—34 cotages at Waterside-road. Mr. Samuel Buntain, architect, 219, St. Vincent-street, Glasgow:—

*Excavation, brick and mason*—*J. Gibson & Sons, 161, Langside-road, Langside, Glasgow.
*Joinery, carpentry and ironmongery*—*C. Gray & Sons, 393, Alexandria Park-street, Dennistoun, Glasgow.
*Slater work, roughcasting*—*A. C. Whyte & Co., Cogan-street, Pollokshaws, Glasgow.
*Steel casement windows*—*The Crittall Manufacturing Co., Ltd., Royal Exchange-place, Glasgow.
*Electricity installation, etc.*—*Johnstone, Park & Co., 15, Oswald-street, Glasgow.
*Plaster*—*A. C. Whyte & Co., Cogan-street, Pollokshaws, Glasgow.
*Terrazzo and tile*—*Toffolo, Jackson & Co., 110, West Regent-street, Glasgow.

**Cheadle (Cheshire).**—Restoration of the Cheadle Parish Church, for Rector and Parochial Council:—

*C. E. Bebbington, Poplar Cottage, Weaverham, Northwich.

**Chesterfield.**—(*a*) 12 houses at Tupton; (*b*) 26 houses at Killowmarsh, for the R.D.C. Messrs. Houfton & Kington, architects, Market-place:—

(*a*) †Clay Cross, Co., Ltd., near Chesterfield ..... £3,804 0
(*b*) †W. A. Goss, Bolsover ..... 8,053 10

**Chesterfield.**—Rebuilding of the "Crown and Cushion," Low Pavement, for Messrs. William Stones, Ltd., Cannon Brewery, Sheffield. Mr. J. R. Wigfull, F.R.I.B.A., architect, 14, Parade-chambers, Sheffield:—

*A. Bradbury & Son, Sheffield.

**Darlington.**—12 houses at Hurworth, for the R.D.C.:—

*Neate Bros.

**Devizes.**—For (*a*) alterations at 23, Sidmouth-street, and (*b*) re-roofing and painting at 5, 6, Planks-place, for the T.C. Borough Surveyor:—

(*a*)—

| | | | |
|---|---|---|---|
| T. Stevens, Devizes | £129 | 19 | 6 |
| W. E. Chivers & Sons, Ltd., Devizes | 116 | 0 | 0 |
| *E. Raddon, Devizes | 92 | 15 | 0 |
| Flower & Son, Rowde | 91 | 18 | 0 |
| G. F. Little, Devizes | 79 | 14 | 0 |

(*b*)—

| | | | |
|---|---|---|---|
| J. J. Stevens & Son, Devizes | £104 | 0 | 0 |
| E. Raddon, Devizes | 102 | 10 | 0 |
| W. Ruddle & Sons, Devizes | 88 | 10 | 0 |
| W. E. Chivers & Sons, Ltd., Devizes | 85 | 0 | 0 |
| Flower & Sons, Rowde | 80 | 0 | 0 |
| *G. F. Little, Devizes | 79 | 19 | 2 |

**Dewsbury.**—Conversion of building in the L.M. and S.R. Offices, Station Yard, at Wellington-road, for the Dewsbury Pioneers Industrial Society, Ltd.:—

*Building Department, Industrial Society, Ltd.

**Dewsbury.**—Number of residences in Bennett-lane:—

*J. Crossley, Crackenedge, Dewsbury.

**Dufftown.**—New houses at Balvenio-street, consisting of two blocks of four houses, for the T.C.:—

*Mason*—

| | | | | |
|---|---|---|---|---|
| *G. Stewart | each block | £465 | 0 | 0 |

*Carpenter*—

| | | | |
|---|---|---|---|
| *H. McCombie | 345 | 0 | 0 |

*Plasterer*—

| | | | |
|---|---|---|---|
| *A. Bain, Aberlour | 120 | 13 | 6 |

*Plumber*—

| | | | |
|---|---|---|---|
| *H. Macpherson | 108 | 0 | 0 |

**Durham.**—Tenders accepted by the C.C. for work in connection with the installation of electric lighting at schools:—

Blackwell Council School—*E. & H. Glover, Darlington.
Crookhill Council School—*F. Reid, Ferens & Co., Newcastle.
Emmaville Council School—*T. G. Usher & Co.

**Edinburgh.**—29 houses at Craiglochart-road, Colinton:—

*J. Miller, Miller-place, Edinburgh.

**Failsworth.**—96 houses on land off Lord-lane. Mr. E. J. Andrew, architect:—

*H. W. & G. T. Froggatt, Olive-street, Failsworth.

**Giffnock.**—12 shops at East Wood Mains-road. Mr. Joseph Wright, architect, 141, Bath-street, Glasgow:—

*J. Lawrence & Co., Ltd., Wellington-street, Glasgow.

**Giffnock South.**—11 four-apartment houses at Athot-drive and Balmeg-avenue:—

*E. Ecrepont, Perelands-road, Preswick.

**Glasgow.**—Reconstruction at 199, Bath-street. Mr. James Taylor Thomson, architect, Bath-street:—

*Building and steel works*—*Gibbie & Co., Ltd., Waterloo-street, Glasgow.
*Joinery, ironmongery and carpentry*—*Dick & Benzie, Fore-street, Pollokshields, Glasgow.
*Plumber*—*W. Anderson & Co. (Glasgow), Ltd., Wellington-street, Glasgow.

**Greenock.**—42 houses in tenements and flats at Low Bow Farm, Low Cornhaddock Farm, and Mount Pleasant-street, for the T.C. Mr. David L. Henderson, Director of Housing. Quantities by Messrs. Woodrow & Thomson, 2, Hamilton-street:—

*Brick, etc.*:—

| | | | | |
|---|---|---|---|---|
| *A. A. Stuart & Sons, Ltd., Glasgow | £5,086 | 1 | 5 | |
| *Glazier*— | | | | |
| *James Graham, Ltd., Greenock | 105 | -15 | 4 | |
| *Carpenter and joiner*— | | | | |
| *Wm. Robertson, Dumbarton | 3,432 | 8 | 7 | |
| *Plumber*— | | | | |
| *Jas Wilson & Sons, Paisley | 2,078 | 17 | 0½ | |
| *Slater*— | | | | |
| *C. Robertson & Sons, Greenock | 1,303 | 7 | 8 | |
| *Plaster*— | | | | |
| *Samuel Holmes, Rutherglen | 1,009 | 11 | 5 | |
| *Electric light*— | | | | |
| *Alex. Robertson, Glasgow | 199 | 8 | 7 | |
| *Iron railings*— | | | | |
| *Wm. Gratrix & Sons, Manchester | 248 | 14 | 8 | |

**Hayfield.**—Alterations and additions at the poor law institution, for the Derbyshire Public Assistance Committee. Mr. G. H. Widdows, F.R.I.B.A., County Architect, County Offices, St. Mary's-gate, Derby:—

*Mason & Hadfield, Ltd., Hayfield, near Stockport.

**Horwich.**—Painting and decoration of the administrative block at the Fall Birch Isolation Hospital for the Horwich, Westhoughton and Blackrod Hospital Committee. Mr. Joseph Dickinson, clerk to Committee:—

†Rigby & Peak, Horwich.

**Hull.**—Renewal and renovation of exterior stonework at Beverley-road baths, for the T.C. Mr. Herbert Hamer, City Engineer:—

| | | | |
|---|---|---|---|
| R. G. Tarran, Hull | £693 | 3 | |
| Kettlewell, Son & Co., Hull | 320 | 0 | |
| G. Panton & Sons, Hull | 315 | 0 | |
| Hull Concrete Stone Co., Hull | 303 | 0 | |
| Quibell & Son, Hull | 292 | 0 | |
| *H. Lowry, Harrogate | 277 | 10 | |
| City Engineer's estimate | 310 | 0 | |

**Hyde (Ches.).**—Additions to works in Muslin-street, for British Leather Cloth Manufacturing Co., Ltd., 70, Spring-gardens, Manchester:—

*T. Warrington, Ltd., Hyde, Ches.

**Ireland.**—The following contracts have been placed by the Commissioners of Public Works during the months of January and February:—

Athlone broadcasting station—erection of a high-power station—
*A. Hull & Co., Dublin.
Phœnix Park, Dublin—adaptations—
*A. P. Watkinson, 121, St. Stephen's-green, Dublin.

**Kidderminster.**—Extensions at the Kidderminster Infirmary, for the Worcestershire Public Assistance Committee:—

‡Housing, Ltd., Blackheath, Birmingham ..... £2,649

**Kingston-on-Thames.**—Internal redecorations at 41 houses in Douglas-road, for the T.C.:—

‡Ides, Ltd., Kingston ..... £400

**Larkhall.**—Housing at Hamilton-street, for the Lanarkshire C.C.:—

*Excavation, brick and mason*—*T. Anderson & Son, Auchingamont-road, Hamilton.
*Joinery, carpentry and ironmongers*—*J. Y. Thorburn, Milton-works, Lesnahage.
*Slater*—*J. & A. Rowatt, Machan-street, Larkhall.
*Plaster*—*R. Longmuir, Larkhall.
*Painter*—*A. G. Barrie, 4, Clydesdale-street, New Stevenston.
*Electricity installation*—*David Henderson, Great Western-road, Glasgow.

**Leeds.**—Five-story buildings in New York-road and Trafalgar-street, for Messrs. Tate, of Leeds, Ltd., 82, Albion-street. Messrs. Bain & Johnson, F. & A.R.I.B.A., architects, 38, Albion-street:—

*S. Macfarlane & Co., Ltd., Leeds.

**¶London.**—Tenders accepted by H.M. Air Ministry for the week ended March 19:—

Abbots Inch—regimental and technical buildings—Gebbie & Co., 53, Waterloo-street, Glasgow.
Farnborough—wind tunnel—Boulton & Paul, Riverside Works, Norwich.

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**¶London.**—Tenders accepted by H.M.O.W. for the week ended March 24:—

National Physical Laboratory, Teddington—alterations to the open jet wind tunnel buildings—Wilson Lovatt & Sons, Ltd., Clarence-street, Wolverhampton.
Richmond (Yorks) P.O. and T.E.—erection—E. M. Tweddle, Ltd., Osborne-road, West Hartlepool.
Cullingworth (Bradford) T.E.—erection—Luther Mortimer, builder, Hebden Bridge.
Shoreditch County Court—joinery, etc.—Steed & Wilson, 140, The Arches, Ravenscourt-park, W.6.

**London.**—Further extensions of Limehouse generating station, for the Stepney B.C.:

*Builders' work*—

| | | | |
|---|---|---|---|
| Borough Engineer and Surveyor's estimate | £27,812 | 0 | 0 |
| S. E. Moss & Sons, Chelmsford | 27,831 | 10 | 10 |
| Thomas & Edge, Ltd. | 26,979 | 0 | 0 |
| H. Neal, Ltd., Northwood | 25,966 | 0 | 0 |
| F. R. Hipperson & Son | 25,497 | 0 | 0 |
| A. E. Symes, Ltd. | 25,450 | 0 | 0 |
| A. E. Farr | 24,860 | 0 | 0 |
| Wilson Lovatt & Sons, Ltd. | 24,705 | 6 | 5 |
| Patman & Fotheringham, Ltd. | 24,513 | 0 | 0 |
| C. H. Gibson, Ltd. | 24,444 | 0 | 0 |
| F. J. Moreton & Son | 24,325 | 0 | 0 |
| J. Jarvis & Sons, Ltd. | 24,242 | 0 | 0 |
| Eastern Construction Co. | 24,150 | 0 | 0 |
| F. D. Hidden & Co., Ltd., Brentford | 23,777 | 0 | 0 |
| Building Works Manager | 23,510 | 0 | 0 |
| J. McKenzie | 22,769 | 18 | 2 |
| Gee, Walker & Slater, Ltd. | 22,715 | 0 | 0 |
| *Ashford Builders' Co., Ltd., 3, Bloomsbury-place, W.C. | 21,845 | 0 | 0 |

*Steelwork*—

| | | | |
|---|---|---|---|
| Borough Engineer and Surveyor's estimate | 16,198 | 0 | 0 |
| Sir Wm. Arrol & Co., Ltd. | 15,405 | 8 | 5 |
| Dorman, Long and Co., Ltd. | 15,395 | 0 | 0 |
| Cleveland Bridge and Eng. Co., Ltd., Darlington | 14,769 | 15 | 4 |
| Nortons (Tividale), Ltd. | 14,194 | 11 | 10 |
| M. T. Shaw & Co., Ltd. | 14,174 | 5 | 10 |
| Horseley Bridge & Eng. Co., Ltd., Birmingham | 14,119 | 4 | 11 |
| Redpath, Brown & Co., Ltd. | 13,827 | 0 | 0 |
| J. Westwood & Co. | 13,768 | 2 | 10 |
| Archibald D. Dawnay & Sons, Ltd. | 13,557 | 0 | 0 |
| Rubery, Owen & Co. | 13,219 | 10 | 0 |
| *Edward Wood & Co., Ltd., Ocean Ironworks, Manchester (Remainder of London.) | 13,095 | 6 | 10 |

**Long Sutton.**—Six pairs of houses on the Garnsgate-road site, for the U.D.C. Mr. A. E. Palmer, architect, 1a, Pinchbeck-road, Spalding:—

*T. J. Jupp, jun., Wisbech ..... £3,600

**Low Fell.**—Garage, for Mr. J. Topping. Mr. J. W. Corking, architect, 16, West-street, Gateshead:—

*J. Taylor, Studley-gardens, Low Fell.
*Steelwork*—*Wright Anderson, Coulthards-lane, Gateshead.

**Luton.**—Number of residences in Alexandra-road:—

*J. T. Garrett, 18, Cowper-street, Luton.

**Manchester.**—Nine houses, seven shops, and houses on Wilbraham-road and Yew Tree-road, Withington. Mr. H. Hankinson, architect, 2, Ashley-road, Altrincham:—

*J. E. Armstrong & Co., Ltd., Manchester.

**Manchester.**—Alterations, etc., to premises, 384, Chester-road, Cornbrook, for the Easy Labour Device Co.:—

*S. Pollock, Manchester.

**Markinch.**—24 houses, for the T.C.:—

*Excavation, mason and brick*—*D. Nairn & Sons, Ladybank, Fifeshire.
*New streets and sewers*—*J. Ramsey & Co., Allan-street, Leslie.
*Joinery, carpentry and ironmongery*—*John Carmichael, Coaltown and Balgownie, Markinch.
*Plumber*—*William Spittall & Son, Engineering works, Markinch.
*Plaster*—*T. B. Scobie & Sons, Backhaven, Fifeshire.
*Slater work and rough-casting*—*W. Currie, 148, Dunnakier-road, Kirkcaldy.
*Painting*—*Jas. M. Henderson, Cardenden, Kinross-shire.
*Fencing work and gates*—*William Blakie, The Forge, Markinch.
*Glazing work*—*T. Coutts & Son, 436, High-street, Kirkcaldy.

**Newcastle-on-Tyne.**—Converting property near the Quayside into flats, for the employees of the Tyne-Tees Steam Shipping Co., Ltd. Messrs. Marshall & Tweedy, architects, Mervyn House, Pilgrim-street:—

*J. R. Rutherford & Son, The Minories Joinery Works, Newcastle:—

**Newcastle-on-Tyne.**—Shopfronts to the premises of Messrs. Levine, Ltd. Mr. J. W. Raylor, architect, St. John-street:—

*G. H. Raven, Poplar-crescent, Gateshead.

**Newcastle-on-Tyne.**—Additions to the Barrasford Sanatorium, for the T.C. Mr. F. H. Holford, City Architect:—

*A. Anderson, Newcastle ..... £9,700

**Preston.**—Church and Sunday school at Eldon-street, for the Building Committee of the Primitive Methodist Church. Mr. F. Howorth, L.R.I.B.A., architect, 10, Theatre-street:—

*W. Jackson & Sons, Preston.

(Estimated cost is £5,000.)

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**Perth.**—For the Robert Douglas Memorial Block of Perth Royal Infirmary. Mr. James Miller, R.S.A., architect, 15, Blythswood-square, Glasgow:—

*Excavation, mason and brick, etc.*—*P. Graham & Sons, Main-street, Bankfoot.
*Concrete, Macasfelt work and plaster*—*J. Bulham & Sons, 105, Canal-crescent, Perth.
*Terrazzo and tile*—*Toffolo, Jackson & Co., 110, West Regent-street, Glasgow.
*Joinery, carpentry and ironmongery*—*Soutar & McQueen, 313, High-street, Perth.
*Steel casement windows*—*The Crittall Manufacturing Co., Ltd., Royal Exchange-place, Glasgow.
*Fireproof doors and concrete*—*P. Graham & Sons, Main-street, Bankfoot.
*Plumber*—*Frew & Stewart, Ltd., 6, Hill-street, Perth.
*Rough casting*—*Croall & Beattie, slaters, etc., Perth.
*Glazier*—*G. R. Douglas & Son, Princes-street, Perth.

**Portobello.**—6 houses at Durham-road. Messrs. Maclennan & Cunningham, architects, 7, South Charlotte-street, Edinburgh:—

*Thomas Anderson & Co. (Builders), Ltd., Easter-road, Edinburgh.

**Thornbury.**—Low-pressure hot water heating installation, to be provided in the new buildings at Thornbury grammar school, for the Gloucestershire E.C. Mr. R. S. Phillips, F.R.I.B.A., County Education Architect, Shire Hall, Gloucester:—

*Brightside Foundry and Engineering Co., Ltd., Birmingham ..... £665

**Tynemouth.**—Alterations and improvements at the Grand Hotel. Messrs. Marshall & Tweedy, architects, Mervyn House, Pilgrim-street, Newcastle:—

*B. Peel, Ltd., East Mill Works, North Shields.

**Upholland.**—4 houses in Sandbrook-road, Hall Green, for the U.D.C. Mr. A. Hunt, surveyor:—

*T. Dickinson & Son, Upholland, near Wigan.

**Wakefield.**—Warehouse in Northgate, for Messrs. J. H. Taylor & Sons, Ltd., 44, Northgate. Messrs. Kay & Lunan, AA.R.I.B.A., architects, 15, Wood-street:—

*Builders*—*E. Lockley.
*Builders' work*—*E. Stewart.
*Slating*—*J. Ives.
*Plumber*—*H. Ellis.
*Steelwork*—*S. Raines.

(All of Wakefield.)

**Walsall.**—Extensions to works in Teddesley-street, for Mr. T. W. Lees, Teddesley-street. Mr. C. C. Gray, A.R.I.B.A., architect, 15, Bridge-street:—

*— Griffiths, Walsall.

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**Walsall.**—Reconstruction of business premises at 77 and 79, Bridge-street. Mr. C. C. Gray, A.R.I.B.A., architect, 15, Bridge-street:—

*Wooton, Ltd., Pinfold, Bloxwich, Walsall.

**Wrexham.**—58 non-parlour houses and 12 parlour houses at Acton Park, for the T.C.:—

*G. F. Sumner ..... £20,440

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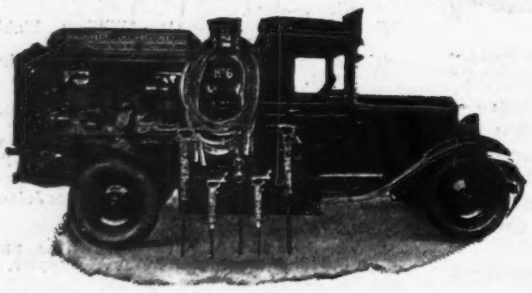
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